YACHTING

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Photo by M. Rosenfeld

Hitting the line at the start of the Bermuda Race, off Montauk Point. "Highland Light," "Brilliant," "Vamare," "Jolie Brise," and "Sea Witch"

From a Painting by Montague Dawson

On the Starboard Tack to Bermuda

"Malabar X" and "Dorade" Win
"Highland Light" Breaks All Race Records

By HERBERT L. STONE

THE story of this year's Bermuda Race has many sides. First, there was the record breaking drive of three days in a hard sou'wester and heavy seas, with all hands carrying on without a let-up to smash their way to St. David's Head in faster time than it had ever been done before in a Bermuda Race. Then there was the unfortunate burning of one of the entries, the schooner *Adriana*, and the gallant rescue of all but one of her crew by the British cutter *Jolie Brise*, which Bobby Somerset, Commodore of the Royal Ocean Racing Club, had sailed across for the race. Finally, there was the long anxious wait for the stragglers that found the going too heavy, or suffered minor casualties that delayed them long after the leaders had finished and brought them in with weary crews.

"Barlovento" driving into it at nine knots

It was a hard race, chiefly because it was a fast race. Not that there was much to do in the way of sail handling. The boats, at least the leaders, sailed on one tack from Montauk all the way to St. David's Head. But to drive any little boat 625 sea miles in three days, with wind and sea forward of the beam, means wet work and slamming through heavy seas at an average of nearly 8¾ knots for the entire distance. After the first two hours the speed of the Class A yachts did not once fall below eight knots. Often it was over nine. Only those who have sailed ocean races realize how wet a little ship can get when driven at this speed into a rough sea. Decks were washed constantly, cockpits were filled

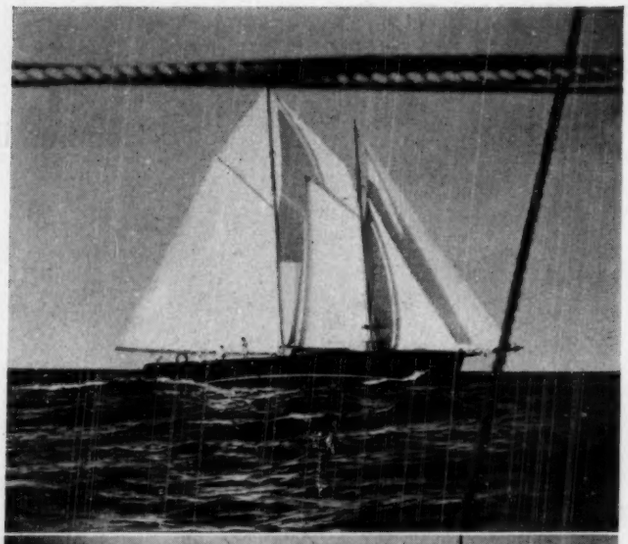


Photo of "Dainty" Copyrighted by P. Doyle & Co., Hamilton

(Top) "Malabar X," owned by R. I. Gale and sailed by John Alden, won in Class A and took the Bermuda Trophy. (Center) "Dainty," the little Bermuda entry, withdrew and came in pumping. (Bottom) "Barlovento," owned by Pierre duPont III, finished fourth and placed eighth. (Right) "Grenadier" takes on the pilot after finishing second on corrected time, three minutes behind "Malabar X"

frequently, while getting about on deck was always precarious. Skylights were battened down and the air below was foul, while many stomachs labored no less than the boats. (Apologies to "Alf.") Sights for observation were difficult until the last day, and cooking on most of the racers was a lost art, or of a very sketchy character. In other words, it was a race one was glad to have sailed in, but gladder still to finish.

Highland Light set a pace that will hardly be beaten by a boat of this size in this race. She sailed so fast that she arrived at the finish before the tug had established the line. The race committee had hardly camped out at St. David's Lighthouse, expecting at least a 24-hour wait for the first boat, before the tall, slim sails of the Boston cutter lifted off Northeast Breakers. She beat up the last six miles to the finish like a cup racer off Newport, going like a train of cars, with everything set that would draw. Just under nine knots she had made from start to finish. The nearest approach to this mark was in the race of 1909 when the schooner *Amorita* covered the course from Sandy Hook to St. David's in 78 hours 19 minutes and 15 seconds. Though the latter course is 45 miles longer than the one from Montauk, *Amorita* was a much larger yacht, 100 feet in length, and her average speed only 8½ knots against 8¾ for the much smaller *Highland Light*.

Twenty-seven yachts started in this year's race, an exceptionally creditable showing for a year when economic conditions are as stringent as in this. Fourteen of these were in the larger Class A, and twelve in Class B. A last minute entry was the schooner *Adriana*. As she was too large to fit in any of the regular classes, she was allowed to start in a special class, racing against the best corrected time of the fleet.

The calibre of the fleet was exceedingly high, and interest was heightened by the entry of two British yachts from the Royal Ocean Racing Club, "Bobby" Somerset's *Jolie Brise*, which raced here in 1926 when she was owned by E. G. Martin, and the *Lexia*, a new boat last year, owned by Major T. P. Rose-Richards, and a contestant in the last Fastnet Race. Both had

Bermuda News Photos

crossed the Atlantic by way of the West Indies to take part in the Bermuda Race. Then there were two Bermuda boats at the starting line, our old friend the *Dainty*, with a new jib-headed ketch rig, and sailed by Alfred Darrell, and the ketch *Zena* sailed by Wilfred Darrell. In the fleet, also, were six new yachts, sailing their first race and of which very little was known as to their speed capabilities. These were the schooner *Barlovento*, owned by P. S. duPont 3rd; the schooner *Brilliant*, Walter Barnum, owner; and the *Mandoo*, built for D. S. Berger, all in Class A. In the smaller class the newcomers were the schooner *Sonny*, Albert D. Phelps, owner; the yawl *Ayesha*, built for John R. Hogan; and the new Wells cutter, *Cyclone*, just down from Nova Scotia, where she was built.

All in all, it was a brave fleet that shoved off that gray afternoon from Montauk Point, where the starting line had been moved from off New London, shortening the course by some twenty miles. The change did not provoke much enthusiasm, for it meant getting underway in the early forenoon and, as the wind was fair, a wait of several hours off the Long Island headland for the starting gun at 3:10 P.M., with all hands impatient to be on their way.

The fresh westerly breeze of the forenoon had backed to sou'west by west as starting time approached and the sky clouded over with a hard, leaden aspect to windward, giving a hint of the rain and wind to follow.

By starting time the wind had eased off a bit, but the direction was fair so that the fleet could lay the course, S.E. by S., with started sheets. Frank Paine, with his America's Cup candidate crew, had *Highland Light* on the line at the gun and he, along with *Grenadier* and *Barlovento*, probably got what honors there were at the start. The adverse tide played hob with the starting plans of many of the other skippers. But the start does not mean much in a race of this length. George Roosevelt's *Mistress* got away late, but with everything drawing hard, she started to overhaul the boats ahead of her in short order, gradually working up with the leaders. *Jolie Brise* got away with the leaders, breaking out a big

Photos by M. Rosenfeld

(Top) "Jolie Brise," in command of Robert Somerset, withdrew from the race to rescue the crew of the burning "Adriana." (Center) "Lexia," a British entry sailed by Major T. P. Rose-Richards, which placed ninth. (Bottom) "Adriana," James H. Otley's 78-foot schooner, which was destroyed by fire. (Left) "Highland Light," sailed by Frank Paine, broke the course record in 71 hours, 35 minutes elapsed time

"Jolie Brise" and her crew, with Robert Somerset seated at the tiller. She sailed from England to enter the race, but hopes of finishing were cast aside by her skipper to rescue the crew of the "Adriana"

tanned jib topsail that pulled her along in good style. *Lexia* had the wrong combination of head sails and dropped back until a big Genoa jib was substituted for the three first used, when she began to move properly.

Five minutes after the large class was away, Class B started, *Dorade*, last year's Transatlantic and Fastnet Race winner, stepping out in the lead, followed by Philip Le Boutillier's *Viking*, and Jay Wells' new *Cyclone*. These three soon caught and passed the laggards of Class A. By nightfall, the fleet was strung out with *Highland Light* leading, closely pressed by *Barlovento*, *Grenadier*, *Teragram*, *Brilliant* and *Malabar X*. At this time the wind was moderate and the sea fairly smooth.

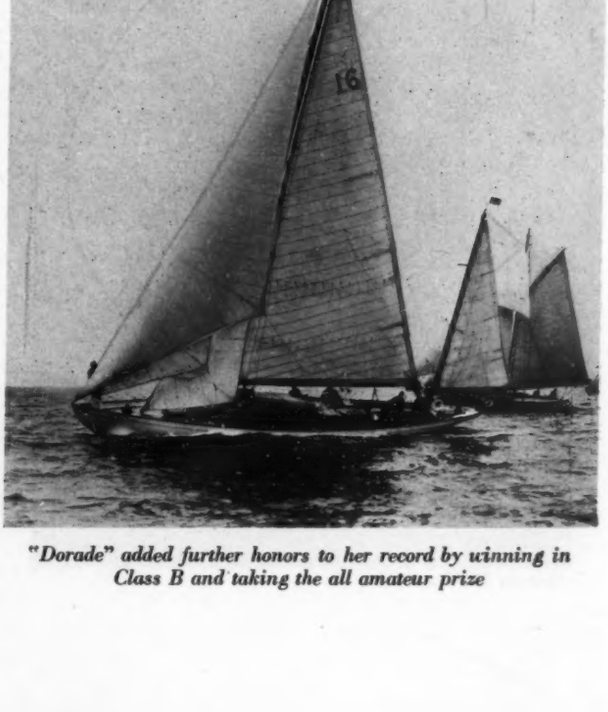
With the coming of darkness, the wind began to harden, with now and then a spatter of rain. Some time before midnight a hard squall swept the fleet, bringing light sails down on deck in a hurry. On some boats mainsails were lowered, only to be set again when the heft of the squall had passed, leaving the wind more to the westward. From this point on the boats really began to step out, reeling off the knots with the regularity of a steamer. Gradually the wind backed to sou'west and hardened, while the sea began to make up rapidly. It was blowing, perhaps, 20 miles an hour, and up to 25 or 30 in the puffs, but on the whole it was remarkably steady, except for occasional squalls. It was too much, with the wind forward of the beam, for light sails, and the fleet had all it could stagger under with lowers, while mainsails were reefed or foresails stowed on some of the boats. The smaller craft, of course, suffered more in this respect than the larger ones, although all had more breeze at times than they wanted.

It was about three o'clock on the morning of the first night out that *Adriana* burned. A tile heating stove in the cabin became overheated and set fire to a locker containing oilskins and hemp rigging. When discovered, it burst out fiercely, and when extinguishers failed to make any impression on it, the cabin was shut tight and distress flares were burned. The watch on *Jolie Brise*, some three miles ahead, saw a rocket (a Very pistol was used, I think) and Bobby Somerset immediately turned back to give aid, burning flares to show that the distress signals had been seen. At this time the *Adriana* was not blazing, the fire being confined below. On reaching the burning yacht, Somerset decided to go alongside and take off the crew, as to launch a boat would have been too slow and dangerous an undertaking. With rare seamanship, *Jolie Brise* was ranged alongside the *Adriana* to leeward, and as the two vessels came together with the heave of the sea, those on the blazing yacht jumped to the British boat, being helped aboard by the latter's crew. *Jolie Brise* was forereaching at about four knots as she went by.

Clarence Kozlay, at the wheel of *Adriana*, keeping her under control until his ten shipmates were rescued, delayed too long. When he jumped it was too late and he fell into the water between the two vessels. In the darkness he was swept away and drowned, the first fatality in these races since they were inaugurated.

Jolie Brise had her rail and stanchions smashed when the yachts came together, and after cruising about in a vain attempt to find Kozlay, she bore off and started back for Montauk, where the ten rescued men were landed early Monday morning. Somerset, of course, abandoned the race and went to Bristol, R. I., for repairs to his damaged ship. It was a gallant piece of work, and executed with rare skill and courage.

It blew hard the second day out. Noon positions showed that the leaders had done from 175 to 180 miles in the 21 hours since the start. Thereafter the pace was to be even faster. The Gulf Stream brought its usual confused sea, but the squalls, except in rare instances, carried nothing vicious, though some of the boats shortened down for a few of them. By noon the second day runs of from 212 to 222 nautical miles for the 24 hours were hung up by the larger yachts, the latter figure being turned in by the *Brilliant*. It was wonderful going, but wet and uncomfortable, particularly below. There was not much to do on deck but sit and steer as the boats drove to the southeast, with now and then a pull on the sheets as the wind backed a bit more. The third day brought hardly any slackening of the pace,

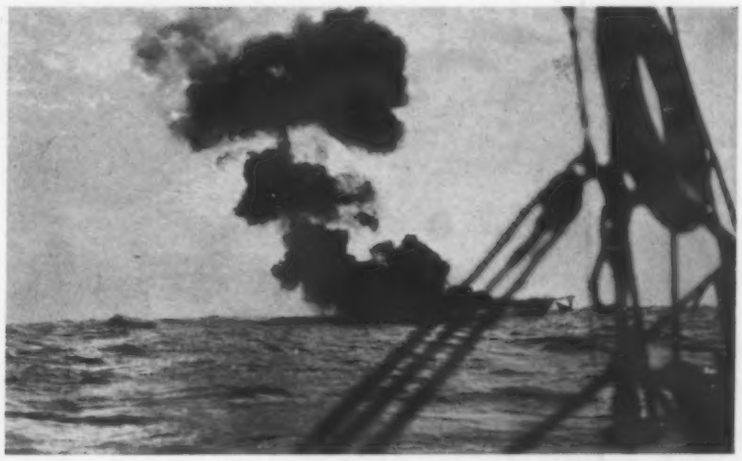


"Dorade" added further honors to her record by winning in Class B and taking the all amateur prize

and many runs of over 200 miles were recorded. While the wind eased off a trifle, the sea was smoother and steering was easier.

At this time *Highland Light* was some 25 miles ahead of the fleet, with Bermuda almost within sight at noon. She tore down on the Northeast Breaker buoy, marking the corner of the outlying reef, and hardened her sheets for the beat up to the finish. She crossed the line at 3:45:43 P.M., less than three days after the start. *Mistress*, well sailed all the way, was her closest competitor. She shaved the buoys around the reef to finish at 7:20:51 P.M. In sight, behind her, came *Barlovento* and *Malabar X*, followed by *Teragram* and *Brilliant*, with *Grenadier* and *Water Gipsy* treading on the latter's heels. It was a stirring finish with only one hour and ten minutes separating these six schooners. Then three hours later *Lexia* finished, in a softening wind, and about 1:30 A.M. the little *Dorade*, first in her class by a margin of ten hours. She had, as always, sailed a fine race.

Malabar X, sailed by her former owner, John Alden, passed *Barlovento* on the short beat up from Kitchen Shoals buoy, getting the gun 5 minutes and 22 seconds before the duPont schooner. So far, she had saved her time on all those ahead of her. But there were others with larger handicaps still out. Would they beat her in? Neither *Teragram* nor *Brilliant* did it, but *Grenadier* was in sight, and dangerous. It was dark when the last named crossed the line, shortly before nine o'clock, with over an hour's allowance on *Malabar*. It was going to be close — a matter of minutes only — perhaps of seconds. With no communication with the shore, the crews of neither boat knew just which had won, or if perhaps some other smaller yacht would slip in during the night to save her time. It was only when they dropped anchor in Hamilton Harbor the next morning that the actual standing was known. *Malabar X* had saved her time, but only by 3 minutes and 17 seconds on *Grenadier*. It was one of the closest finishes in the long record of Bermuda races. *Water Gipsy*, hard driven all the way, took third place on corrected time and *Teragram* was fourth. *Highland Light*, in spite of her record breaking run, had to be content with fifth place on corrected time.



The "Adriana" in flames, eighty miles southeast of Montauk Point, where she sank

In Class B, the little *Twilight*, with an allowance of 17 hours 33 minutes, figured winner of second place, with the new yawl *Ayesha* third and the *Viking* fourth. So close were the boats in this class that only five minutes separated third and fifth place in the final standing. It was a great race — perhaps the fastest that will ever be sailed for years to come.

Of the unfortunate tragedy, with the loss of a well-known and much liked yachtsman, most of the crews knew nothing until they finished, except those on *Mandoo* and *Sonny*, both of which stood by the burning yacht when they sighted her, after the crew had been taken off by *Jolie Brise*. But with the universal regret at the occurrence went admiration and praise for Somerset and his crew, who, by their prompt and efficient action upheld the best traditions of the sea.

George Roosevelt sailed "Mistress" across the finish line second, to take seventh place on corrected time. In the background is William McMillan's "Water Gipsy," which placed third

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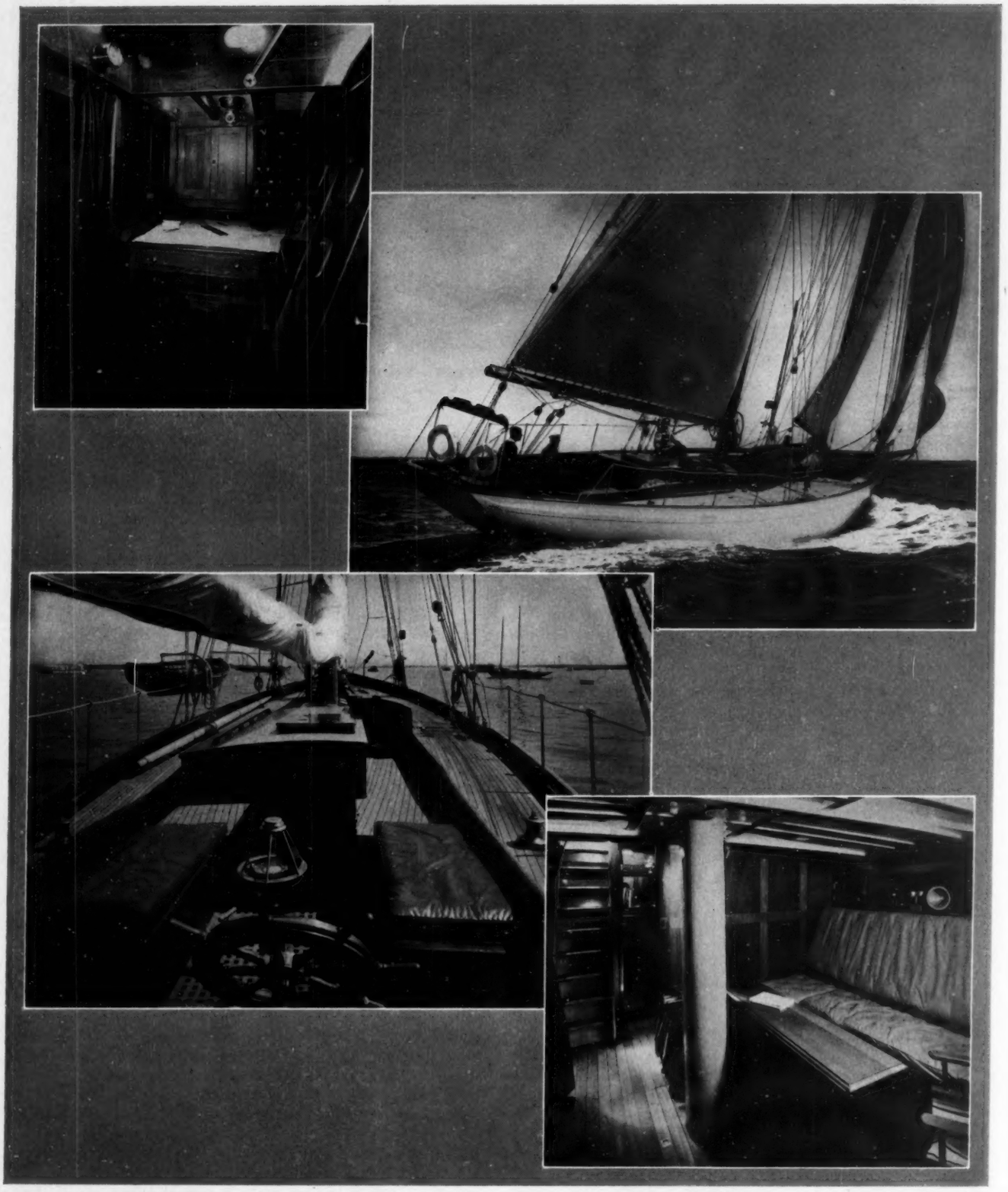
"Curlew's" Adventure

In view of the many conflicting reports regarding the adventures of the *Curlew*, the following explanation, given by the yawl's navigator and approved by her crew, is published as an authorized account of the facts — an account which her crew feel they owe to yachtsmen and to the government authorities for the concern and inconvenience inadvertently caused by them, and in an effort to clear up the unpleasant publicity which followed in their wake.

The crew of the *Curlew* entered the race admittedly green to ocean racing, but they had experienced three years of coastwise cruising in their boat and had full confidence in their craft, as well as a realization of the rigors of ocean racing, for which the boat was adequately equipped. Rumors of *Curlew's* unfitness for the race reached the committee before the start of the race, and the committee's inspection was, therefore, doubly rigid, even to the extent of testing the hull with a knife for dry

(Continued on page 76)



"Barlovento" + + A New Auxiliary Cruising Schooner, From Designs by Cox & Stevens, Owned by Pierre S. duPont, 3rd

"Barlovento" sailed her maiden offshore voyage in the Bermuda Race. She was the fourth boat to finish and placed eighth on corrected time in her class. A handsome vessel, she is 64 feet in length, over all, and is powered with a 4-cylinder Hill-Diesel motor. She is flush-decked, with a small house aft, and unusually spacious quarters below, including a large after stateroom, spacious main cabin, and chart room.

Happy Ending

By

ALFRED F. LOOMIS

MET Tommy Wiley for the first time on the French coast, off the shifting entrance to Trouville. The tide was at the top of the flood, all but turned, the wind was slight, and as I didn't want to be locked out of the wet basin, I was entering under power. Ahead of me I saw a lovely cutter — not one of your old-fashioned type — which are beautiful in their ruggedness, but a racing boat, slender, low of hull, tall of rig, gracefully proportioned for speed. She was finished bright, and in the warm sunlight her pine deck and mahogany sides seemed to lend a creamy glow to the rippling whiteness of her sails. Coming to the western edge of the narrow channel she tacked and slowly gathered way on the other board. There I overtook her and was passing with a silent wave when her helmsman called across the almost breathless water.

"Are you a stranger here, *Swastika?*" (*Swastika* being the name of my yawl.)

"Yes," I returned. "Am I standing into danger?"

"You'd better leave the next black buoy to starboard," he replied. "It's fifty yards out of position."

I had idled my motor at his first word, and now had so little headway that the two yachts drew together. "Thanks," said I. "I'd probably have gone aground. Can I return the favor by towing you in?"

Wiley looked aloft at his towering spread of canvas, cast a calculating glance at the lock gates perhaps a quarter-mile away, and gently shook his head. "I think I can make it," he declared. "The element of uncertainty doubles the enjoyment."

"Well," said I, dubiously, for the wind was very light and dead ahead . . . "See you inside." And I motored in.

I had been moored in the Deauville basin for at least twenty minutes when I stepped to the gates to see how the element of uncertainty was coming on. *Thalassa* — I had read her name in passing and looked up her ownership in Lloyd's — was again on the starboard tack, inside the jetties, but seemingly bound up-channel for Trouville. The current had begun its ebb. The wetted surface of the lock gates which betrayed the falling tide was at least four inches wide and growing fast. The uniformed guards by the gates silently watched the diminishing water, apparently oblivious of the yacht's maneuvers. When the level reached a certain mark they would close the basin whether one or a dozen boats remained outside. They had to, for the safety of those moored within.

As the minutes passed and the water subsided I became unable to curb my impatience. "Are you coming in?" I called. "Shall I tell them to wait for you?"

"They won't," Wiley calmly answered. "I think I'll do the trick."

As he neared the south side of the narrow harbor he came about, heading a hundred yards high of the gates, no more than twenty yards between his fragile bow and the solid masonry of the retaining wall. I saw at once that for each foot he forged ahead the ebb current carried him a yard to the westward, and admired Wiley for the closeness of his calculations. If a sudden puff had caught his sails he might have come to grief. But he discounted that contingency.

Perhaps three minutes had passed when the French guards began to lose their immobility. They exchanged words and motioned with their hands to supplement their conversation. But as yet they made no move toward closing the gates. I stood transfixed, willing *Thalassa* to hurry in; and if mind had true supremacy over matter she would have leaped forward, torpedo like. Instead she drifted slowly downstream, ever slightly nearer.

The moment came when I, by leaning out, could have placed my hand on *Thalassa's* bow, and I made as if to do so. But Wiley stopped me. "Give her another minute by herself," said he. "That will put her inside. I might get a little puff."

I restrained myself and the seconds dragged on. The puff came. The cutter, heeling slightly, seemed to gather herself like a bay mare before slipping inside.

"*Voilà*," said one guard, unemphatically, as he closed his gate some eight or nine inches astern of *Thalassa*.

"*Bravo*," rejoined the other, with somewhat more feeling.

When the gates joggled together I ran across and came up alongside the cutter at the west side of the basin.

Wiley was putting the boom rest into place as his two paid hands made fast the mooring lines. "Lower away," said he, and turned toward me. "If they had closed the gates in my face I would have drifted out with the stream and sailed on to Le Havre. It wasn't a matter of life and death."

I stepped aboard to help lower sail, and marked that he worked with extreme deliberation. It was not the deliberation of a lazy man or of one mentally slow. Rather it was the cautious movement of one who has schooled himself to avoid violence of gesture. Later when he asked me below to have a drink and begged me to excuse him from participating, I jumped to a conclusion. "A yachtsman who doesn't drink?" I asked. "It seems hardly proper."

"It's my heart, you know," said he, apologetically. "Got a bit of shrapnel near it during the war, and I have to take things easy."

With the picture of his calm, leisurely entrance vivid in my mind I was ready for the moment to believe that he could always take things easily aboard *Thalassa*. But then I had another image of such a racing boat bouncing in the short Channel sea, and I exclaimed, "Surely, man, you don't think sailing is good for the heart!"

He laughed. "I'm not easily frightened to death, if that's what you mean, and if it comes on to blow I have two excellent hands who do the heavy work. *Thalassa* steers like a witch. At such times I chock myself off in the cockpit, take the helm, and haven't a thing to worry me. Fortunately, yachting is the only sport for a man with my diaphanous attachment to life. I say 'fortunately,' because all other sports bore me to extinction."

That evening Wiley accompanied me aboard to supper and we revealed our differing cruising philosophies and techniques in mutual tolerance and understanding. My preference is to go on and on to new waters — his, he told me, was to explore each harbor thoroughly, to know the coast under all conditions of wind and tide, to feel as much at home on the sea as his *Thalassa*, which was named for it. I need not add that he was wedded to sail and tiller and entertained complete contempt for anything that was rotary in its movement.

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It was the next year, I think, that I saw Tommy Wiley again. Once more I was entering under power— this time at Dieppe — and I own to a twinge of shame when he saw me with my sails furled. He sat in the stern sheets of a mahogany skiff, a uniformed sailor at the oars moving him from place to place as he took soundings with a three-pound lead. Later, when the tide lifted and I passed through the Pollet draw to find mooring in the Duquesne basin, Wiley came in after me and accepted my invitation to step aboard.

As if to set my mind at rest he began by telling me that Dieppe was one haven, what with Channel packets coming and going, at which he always took a tow. And he hoped (somewhat to my surprise) that we might go out together so that if I felt disposed he could be spared a fee. I told him that I would suit my departure to his.

"Now that that's settled," I added, "will you kindly tell me what treasure you expected to pick up with your lead from the polluted floor of Dieppe?"

He seated himself carefully in a chair which I had had brought for him on deck, and humorously shrugged his shoulders. "I was doing that," said he, "to get away from my paying guests. They wanted me to come to this port, and in a way I had to. But I'm dashed if I have to caper about with them ashore."

He sat with his chair turned so that he faced *Thalassa*, moored a hundred yards or so from us, and I noticed that his eyes continually caressed her lovely hull and lofty mast.

"Isn't this a new departure?" I asked. "Guests on *Thalassa*? I thought you liked going your own gait."

"I do. More now than I did a year ago. These are *paying* guests." He paused a moment and continued in the best counterfeit of an offhand manner that he could assume. "The fact is I've had terrific financial reverses. I can't afford the cutter. I can't give her up. I would die ashore. So to make both ends meet I have to take these guests. They're good fellows, you know, but they don't love the sea as I do, and I have to get away from them from time to time. By the by, do you think this makes me a professional?"

"You, a professional!" I hooted. "An amateur is one who loves something. If you love *Thalassa* enough to share her rather than give her up altogether — or, looking at it from another angle, if you're so keen about sailing that you will endure the embarrassments of paying guests rather than stay ashore, I think you are doubly an amateur."

Nevertheless, I reflected uncomfortably that in the opinion of those who really matter, Wiley's amateur status had been impaired.

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Our third meeting, a year later, occurred in the Channel south of the English port of Newhaven. I had noticed a sailing dinghy scooting along, her helmsman immovable at the tiller, head back and eyes unwavering on the luff of his sail. Calm overtook us and I launched my skiff, rowing over for a talk with the intrepid stranger.

"Wiley!" I exclaimed, grasping his gunwale and fending off. "Where's *Thalassa?*"

"This is she," he replied, gravely. "You hadn't heard that my other boat was burned at Bembridge just after I had hauled her out last fall?"

"I heard about the fire," I replied. "But *Thalassa* — that dream of beauty."

Our two small boats lifted leisurely to the heave of the sleeping sea. "Perhaps it was for the best," said Wiley stoically, "I — well, I had been expelled from my club for professionalism — you know, those paying guests — and I doubt if I could have gone on with her. Now I live in a room by the sea at Newhaven and sail this little dream of beauty — again an amateur, I hope. I make no comparisons with my old love, but I feel a more intimate companionship with the sea in this 14-footer than I ever did before."

He said nothing of the shock of his loss or of his expulsion from the fellowship of Corinthians, but, scanning his face, I could see that he had definitely aged. I asked no questions, other than the routine one of, "Have you been caught in anything dirty?"

"Yes, but I've been able to run for it. And you ought to see her off the wind." His grave face brightened vividly. He held out a hand, palm down, and oscillated it slightly from the wrist. "Like that," said he. "A marble on her thwart would hardly roll six inches from side to side. Oh, marvelous!"

"Your heart?" I asked. "Does it give you any trouble?"

"No more than usual. I'm no weakling, you know," he boasted. "I can reef, haul, and steer with the best of you, so long as I take things easily."

I asked Wiley if he intended to lie there becalmed all night, and he elected to think my question facetious. "There will be wind before dark. Plenty of it. Where are you bound?"

"Newhaven," said I, at random. "If the wind is west it will be a close reach in."

"And a close squeak for boats that aren't weatherly."

"As bad as that?" I asked. "Say, wouldn't you like me to bring over the yawl and tow you a bit? Not in, but to weather a mile or so."

He looked toward the distant shore, marked at that moment by the smoke of a steamer leaving Newhaven. "No, thanks. I ought to make it."

"Then how about tying in a reef while I'm here. Wouldn't that help?"

"No. I'll need whole sail for the first hour or so, and perhaps I shan't have to reef at all."

The first darkening of the water to westward now became apparent. Expressing a final wish that I could do something to assist Wiley, I rowed back to my *Swastika* and boarded her as the wind came in. The meeting had been a pleasant one, for, rising above his personal misfortunes, Wiley had suffused me afresh with his love of sailing. I found myself thinking fatalistically that if (or rather, when) he did overtax his heart in some such exigency as this approaching westerly he would die happy.

As I gathered way, *Thalassa* glided past me and I noticed how much at union with his boat this sailor was — stretched at ease, one arm thrown carelessly along the tiller, head just showing above the gunwale, and face uplifted so that his eyes commanded the luff of his sail. After nodding to me he looked to westward,

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A Transatlantic Winter Passage

The Cruise of the "Ahto," Estonia to Cowes

By AHTO WALTER

THE new *Ahto*, a 29-foot double-ended cutter, sailed from Tallinn, Estonia, under the light of the cold Northern Star on November first. She was bound for New York, eight thousand miles away, with Uku, my brother, and myself the crew. We hastened to clear the Baltic before the ice set in.

"Ahto" is the Estonian god of the sea, the Neptune of English speaking people. I was christened Ahto, and so were my two boats. The second *Ahto* was built in Tallinn, my home, in 1912. Tallinn is the principal seaport of the Estonian Republic, and the latter's population of 1,500,000 were formerly subjects of Imperial Russia, when Tallinn was known as Reval. There are two yacht clubs in Tallinn and there is considerable interest in yachting, which has resulted in the building of good boats and the developing of good yacht designers. Eggers, one of these naval architects, designed *Ahto*.

The "Ahto," second of that name, is 29 feet over all, and is cutter-rigged

On an over all length of 29 feet, *Ahto* has a beam of 8 feet 10 inches and a draft of 5 feet 2 inches. She is oak framed and planked with pine. Two tons of ballast are carried outside and one ton inside. There is full headroom with accommodations for five. Two 120-gallon tanks were installed in place of two quarter berths, and this gave us such an abundance of water that we enjoyed the occasional luxury of washing in fresh water.

The usual supply of canned goods, rice, flour, potatoes, lard and oatmeal, were taken aboard in Tallinn, but a large part of our provisions for the crossing came from the store left at Mr. Ratsey's in Cowes by *Dorade* after the Transatlantic Race. The cooking was done on a single burner primus stove in the galley forward.

The greatest problem we faced in getting started for New York was in evading the requests of almost one hundred male applicants and sixty young ladies who wanted to sail with us to America. But finally we cleared Tallinn without any stowaways.

Tallinn is almost on the sixtieth parallel of latitude and practically as far north as Greenland, so it was bitterly cold when we sailed into the open Baltic on the night of November first. A light northerly wind gave *Ahto* a favorable slant as she slipped along at five knots on a course for Gotland, a Baltic island. We had barely sailed ten miles when the wind hauled ahead, raising a nasty head sea. So instead of wearing out the sails and ourselves, we put into Paldisny and anchored for the remainder of the night, which gave us ample time to sleep, November nights in the Baltic being long.

Next day the wind was still ahead, but we started a cold, wet beat to windward. Sailing out of the harbor we sighted a three-masted sailing vessel which left Tallinn with *Ahto*. She was aground, probably forever, a sorrowful picture. Fifteen miles of useless driving into the steep Baltic seas was enough for us and we anchored, awaiting a more favorable wind. The wind and sea increased to such an extent that we were finally forced to run to the winter harbor of Odensholm.

The following day dawned cold and foggy with the monotonous harbor fog signal blasting in our ears; so we weighed anchor and departed Odensholm, playing the only musical instrument on board *Ahto*, the fog horn, in self defense. Outside it was thick with fog and steamers. We answered their bells with the fog horn until our lips became swollen. The wind was increasing and we set the storm trysail while *Ahto* rolled her rails under, drenching us with ice cold water. The situation reminded me of the time off the Portuguese coast, in my first *Ahto*, when my brother, Kou, was twice swept overboard. But there the water was warm while in the Baltic the water temperature was only four degrees above freezing, and the air was colder still. The cold pierced us to the bone, but finally *Ahto* was steadied by the trysail and we lay to more comfortably.

For thirty-six hours the wind increased, and then the storm trysail blew out. We came on deck for another icy drenching while another sail was bent on. By this time we were being blown dangerously toward the lee shore of Gotland. We could not claw off against the seas and our only chance was to run before it and try to make a harbor. According to our chart, which was only a small scale general chart of the Baltic, there was a harbor about three miles away. But we were only a mile offshore and would be driven onto it before the harbor could be made. Our only chance was to look for a shelter behind the outlying rocky reefs which would protect us from the breakers. So I climbed the mast to look for a smooth passage between the rocks.

There was nothing in sight save the thundering breakers. As I searched in vain, I was practically resigned to my fate and felt that *Ahto* had reached her grave; but as we drew nearer the breakers, I saw one

narrow passage in the foaming surf. I shouted to Uku at the tiller to steer according to my waving. *Ahto* raced toward the passage with cresting seas on all sides. A large wave broke over the stern, submerging Uku, but it boosted *Ahto* into the passage and she bumped across the reef into deeper and quieter water in the shelter of the rocks. We thanked God for our good fortune and for not having any of the romantics aboard to worry about during those dangerous moments.

We anchored and went below to warm up over the primus stove and change our soaked clothes. Some hospitable fishermen came alongside and gave us bread and two large salmon. We were pleased with the fresh food as the bacon from Tallinn was becoming rather lively and the eggs had taken such a tossing that every third egg was spoiled. We remained snug behind the reef until the wind moderated and shifted more favorably. *Ahto* had sailed 180 miles from Tallinn in six interrupted days, and her next port of call was Copenhagen. With the awaited shift of wind we got under way and ran out through a broader channel than the one we had previously squeezed through.

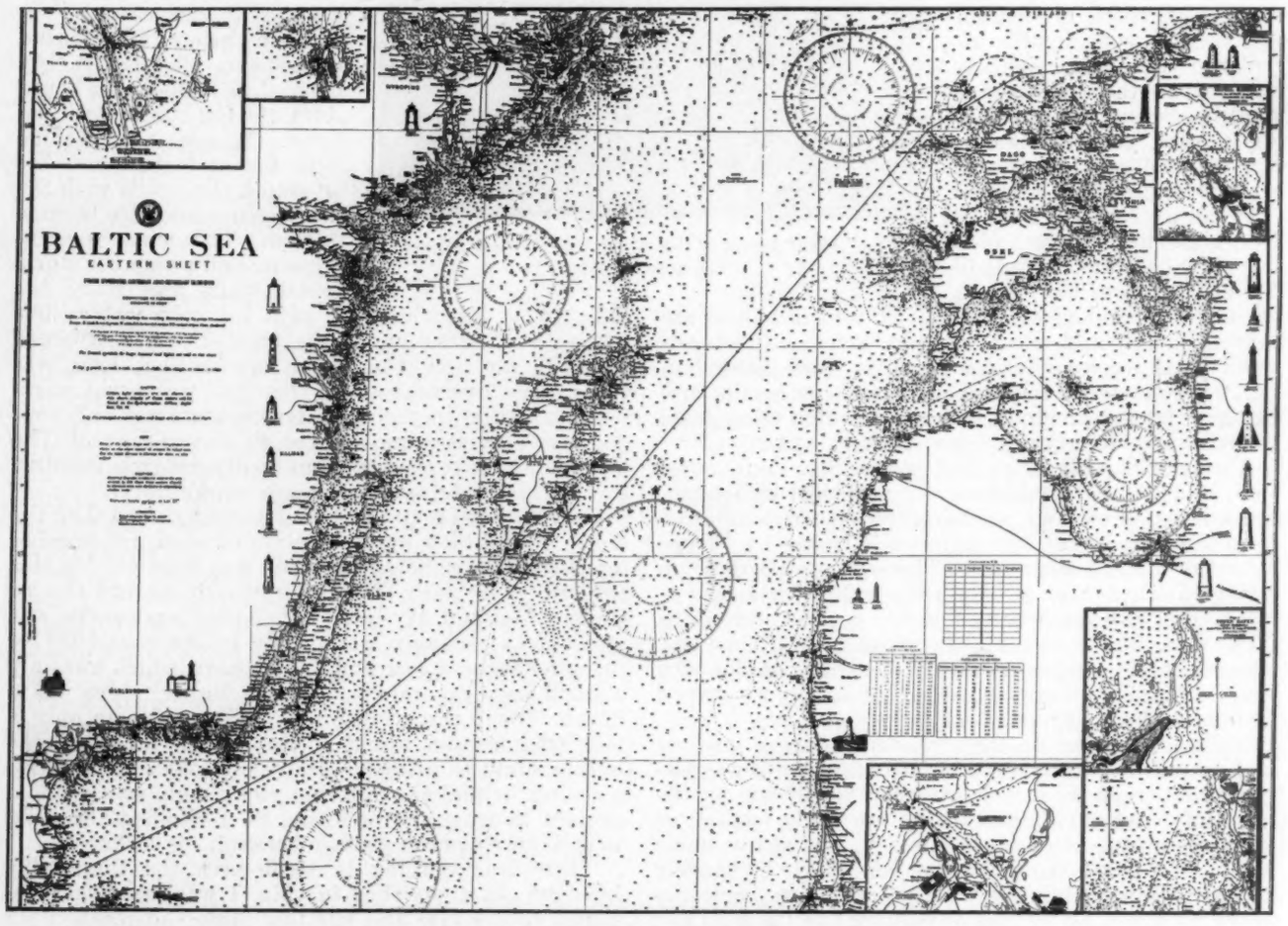
It was still foggy and cold outside. In passing the southern end of Gotland, we met the Estonian steamer *Linda*, in which I had shipped in the past. To a seaman, the meeting of one's former ship is like seeing an old friend; besides, I knew that many of my old shipmates were still on board. She honored us with her whistle and then passed on into the fog. Good wind followed in her wake and we soon had the spinnaker set before it, sailing "with open Bible" southwest toward Copenhagen.

The northerly increased until the spinnaker pole bent to the point of breaking, but we carried on, as *Ahto* steered well and we were anxious to sail out of the Baltic before we were frozen in. But our joy was short-lived. The wind drew abeam and *Ahto* commenced burying her rail. Sail was shortened and we carried on, arriving in Copenhagen on November 15th, 320 miles from Gotland.

In Copenhagen, the master of the *S.S. Polaris* invited us aboard and advised that we take the shorter and safer course from the Baltic into the North Sea by way of the Limfjord, which crosses northern Denmark, and not try to sail through the Skagerrak. We did not have charts for the Limfjord, and the good captain gave us his. We prepared to leave early the next morning.

Just as we were turning into our bunks the night before departure, there was a knock on the companion hatch. We bade the visitor, a young gentleman, to come below. After introducing himself, he went on to say that his forbears were Vikings and that an ancestor had led one of the pre-Columbian expeditions to Greenland from Norway. He explained that he had cruised into most of the Scandinavian ports, had had wide offshore cruising experience, and had never known a moment of seasickness. He was a well-known author and reporter and would like to sail to America in *Ahto*. For this privilege he offered two thousand kronen. This was a handsome sum and would relieve us of the gravest problem we faced — lack of funds. So we agreed and told him to be ready next day.

He arrived on schedule with a troupe of friends, and



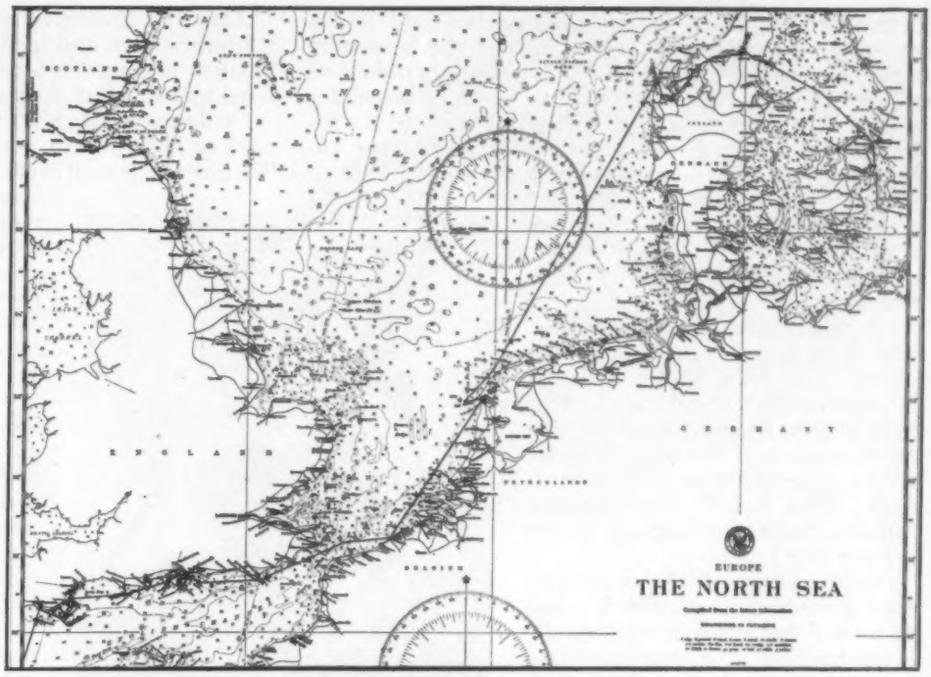
The "Ahto's" passage from Tallinn, in Estonia, to Copenhagen

after stowing his gear below appeared on deck wearing a yachting cap richly decorated with gold braid. While we hoisted sail, he ceremoniously doffed his cap and with much pomp bade his friends farewell.

Outside Copenhagen harbor there was a steep nasty sea and squally wind which laid *Ahto* down to her rail. During the first ten miles of pounding into it our Viking friend kept his head over the lee rail.

"Never mind, it will moderate soon," we consoled.

There was no answer save from the wind, which blew harder while the land-locked waves grew more confused. We set the storm sail and settled down for a dirty night. The Viking became greener and his face resembled death, so we advised him to take to his bunk, which he promptly did. At the end of my watch I went below and the newcomer raised his pale face from the bunk and asked when we were going to anchor for the night. I answered that we would carry on as long as the breeze held. At this he buried his head without further comment.



Track of the "Ahto" from Copenhagen to Cowes

After *Ahto* passed between Helsinger, Denmark, and Halsingborg, Sweden, where the channel broadens into the Kattegat, the wind increased, bringing a cold fog and rain. Then the binnacle light blew out and we steered by occasionally turning a flashlight on the compass, meanwhile wishing that all binnacle makers would take their last trip to the place where fires never burn out. Some day a genius may rise to the occasion and design a binnacle light that will not blow out. Besides trouble with the compass, our humor was further dampened by the cold spray streaming off the windward bow.

About midnight we passed the island of Anholt, which offered a good anchorage, but, as the steamers were not seeking shelter, we figured that the weather would not be too bad to continue northwestward to the Limfjord. It was so cold on deck that we shortened the watches to two hours so that we could get warmed up a bit between tricks. The newcomer remained stiff in his bunk, looking far more like a corpse than the Viking he claimed to be.

Before daylight we raised the light at the mouth of the Limfjord. *Ahto* was heeled over to 40 or 45 degrees as she sailed into the mouth of the Limfjord, where we caught sight of numerous sailing vessels at anchor, stormbound. Our entry caused considerable interest as the rails of all the steamers were crowded with sailors gazing in our direction. We did not anchor but continued on our way into the Limfjord to Aalborg.

Inside the fjord the going was smooth and our Viking friend blossomed forth in his sparkling yachting cap. The breeze moderated and we were able to hoist full mainsail in place of the storm sail. About noon we reached Aalborg and, sighting the Estonian motorsailer *Merilind*, we hove alongside and she took our lines. The master invited us aboard and presented me with an Estonian paper bearing a funny caricature of myself. We had a hearty laugh over it and then went below for a good, square meal.

Ahto remained alongside the *Merilind* for a day and a half, awaiting a favorable wind for sailing through the narrow fjord. Then we set sail again in a light following wind which soon petered out and we had to row *Ahto* through the open drawbridges, much to the amusement of the crowds waiting to see us pass. We anchored at Logstor that night as the fjord is not lighted for night navigation.

Next morning a fresh breeze drove us along nicely and into broader water, whereupon our companion sought his bunk and hid himself under his beloved feather blanket. At twilight we entered Semvik, within fifteen miles of the North Sea, and there awaited a shift of the wind, which was then blowing too strong to tack against.

In the morning the quay alongside *Ahto* was crowded with fishermen who had read in the papers that we were sailing to Rotterdam. They told us that it would be suicide to sail in the open North Sea in such a nutshell at that time of the year. We answered that we were born under a lucky star and intended to continue. After a three-day wait the wind came out of the southeast and we sailed out of the Limfjord into the North Sea.

The wind dropped after two days of good sailing and a thick fog came in on fluky southerly airs. For another two days we beat slowly to windward until we sighted the Netherland coast looming ahead in the gray fog. We tried to sail away from the coast but a current carried *Ahto* nearer and nearer until we were forced to anchor. The anchor would not hold, but an oyster boat happened along and took us in tow until the line parted. By this time there was a little more wind and we trimmed sails on a course for Helder at the entrance to the Zuyder Zee. We reached the Dutch port on November 30th.

From Helder, I took a train to Rotterdam to meet my brother Jarrilo, who planned to sail to America with Uku and myself. The Viking departed *Ahto* in Helder, but not until I had advanced his railroad fare. We never saw the two thousand kronen he had promised to contribute.

We lay over in Helder, cleaning ship and gear, until

December 7th, when we weighed anchor and laid a course for Ostend. Outside the harbor the seas were breaking over the bar. Two Dutch destroyers passed us on the way out, but after half an hour returned for shelter. It was blowing hard and piling up a nasty sea that made the going wet and punishing. Farther offshore a submarine emerged close alongside and kept us company for about an hour. She pitched terribly as she labored along into the seas, her screws coming out of the water with a deafening noise.

By noon land dropped out of sight and a school of porpoises joined *Ahto*. Uku unlimbered the harpoon and drove it home into an eight-footer. As if to spite us, the porpoise started towing *Ahto* backwards, sometimes as fast as two knots. This lasted about twenty minutes, until the harpoon broke and our bag was lost.

On December 8th the swells and wind increased from W.S.W., but we carried full sail in order to make a good offing from the outlying shoals. Later, the wind abated, leaving a nasty swell and *Ahto* was caught in an onshore current. At 8:00 a.m. the land appeared but fortunately a light sea breeze laden with fog sprang up. A course was laid to clear the shore, and we continued, feeling our way with the lead until we entered Zeebrugge Harbor at 2:00 a.m. next morning.

The "Ahto" was built in 1912, in Tallinn

The harbormaster came aboard and after examining our papers evinced an interest in our future intentions. When we told him we planned to sail to America, he threw up his hands.

Like most Central Europeans, he regarded Estonians as some sort of Eskimos, and questioned our knowledge of navigation. When we informed him that all three of us could navigate and had gone to a nautical school, he intimated that we might reach America.

On December 10th we left Zeebrugge, reaching Ostend that same day, after a heavy swell nearly drove *Ahto* against the high breakwater at the entrance of the Belgian port. We anchored in the fisherman's harbor where the odor was so strong that we were not bothered by the usual curious visitors. A day of it was more than sufficient and we weighed anchor for Cowes on December 11th.

The run across the English Channel was marked by light winds and it took three days to make 160 miles to Cowes. We anchored in Cowes for eleven days, and there met my old shipmate, P. C. Barber, who had sailed from Newport to Plymouth last summer in the first *Ahto*. He was fitting out a cutter, which looked like a sister ship of *Firecrest*, for a passage to America. We set to work with him in hopes that he could sail at the same time as *Ahto*, and we could make the passage in company with his boat, *Enterprise*. Uku, my brother, agreed to sail with Barber, and that left only two of us on *Ahto*, Jarrilo and myself.

In Cowes, we hauled out and while on the ways Mr. Ratsey came aboard and found me sewing sails. He invited us into his sail loft, repaired our sails and presented us with some additional canvas. A wonderful race, the Anglo Saxons; everywhere they offer us assistance and feel disappointed if we decline.

Ahto and *Enterprise* departed Cowes in company on Christmas Eve and made Gosport for the holiday celebration. During the days of celebration, *Ahto's* boat capsized and was lost, so we sailed to America without one.

On January 7th, after many days spent in preparation, both yachts put to sea bound down the Channel for Torquay. A strong favorable current carried us down the Solent and past the Needles in short order. Off the Needles we encountered a high, steep sea which slowed us down, but we made Portland Bill on the morning of January 8th. The meteorological signals on the lighthouse warned against a coming southwest blow. We carried on, however, in an attempt to reach the shelter of Torquay. By afternoon, it was blowing so hard that we had to lower the mainsail. I went forward and started lowering until a great wave swept over the bow and carried me aft over the stern. However, Jarrilo immediately pulled me on deck by the body line I was wearing. My arm was badly hurt when I was swept overboard, so Jarrilo finished the job of lowering and we continued into Torquay under storm sails.

Inside the harbor two fishing boats were sunk and a large crowd was gathered on the shore. They were rather amazed at seeing a small yacht coming in at that time of the year. The harbormaster came aboard, collected his dues and assigned a berth to *Ahto*. The next day, January 11th, the gale abated and we were invited to tie alongside a fenced-in quay built for some special purpose. Presently a curious crowd gathered to look us over. Shortly after we discovered a sign at the entrance to the quay reading thus: "On view, the little yacht *Ahto*, which is sailing around the world. Entrance before noon 2d, afternoon 3d." Some enterprising individual was capitalizing *Ahto* and unknowingly we had been performing as the local menagerie. We departed quickly, regardless of the storm warnings, and headed for Plymouth.

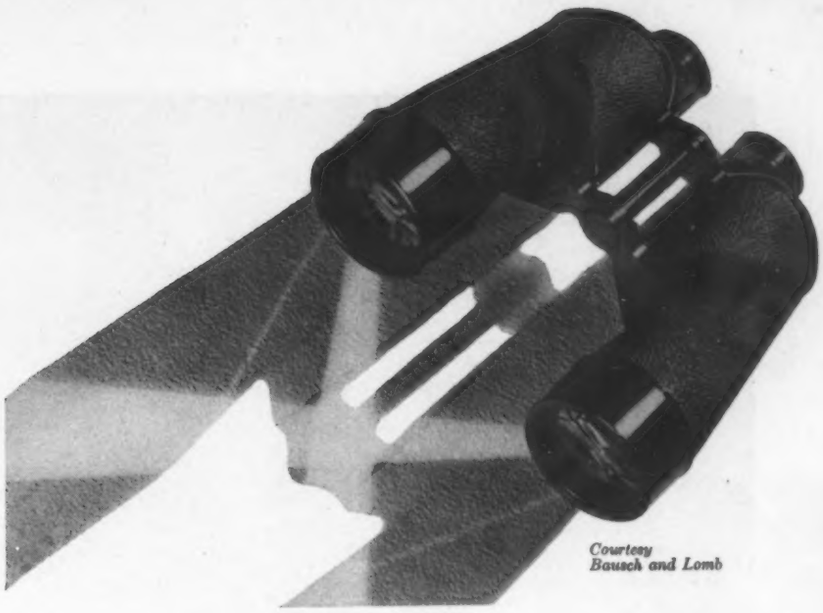
It was blowing about force 6 or 7 outside, dead ahead, and, as we were making little progress, we ran for Dartmouth Harbor. To enter the River Dart we had to run straight before the wind. There were steep breaking seas at the entrance which at times left *Ahto's* rudder high in the air, clear of the water and out of control. On one of these occasions, *Ahto* broached to and rolled down on her beam ends, burying her sails in the water. I thought our sails were lost but *Ahto* slowly righted herself and gathered way in time to keep us off the shore. We finally made our way into the harbor and anchored, more confident than ever in the ability of our ship.

On January 14th, with reefed mainsail, we got underway for Salcombe, about fourteen miles distant. All went well until we headed into the strong current off Start Point, which, together with a wind of force seven, was too much for *Ahto* and we were forced to run back.

When the northwesterly gale abated, we set sail again for Plymouth on January 19th. On the way we met *Enterprise*, and sailed with her for nine hours until the wind increased, when we left her astern and arrived in Plymouth two hours ahead of her. In Plymouth we made the final preparations for the run across the Bay of Biscay to Vigo, in Spain. (*To be continued*)

The Eyes of The Ship

A Guide to Yachtsmen in the Selection of Binoculars



Courtesy Bausch and Lomb

IT IS safe to call binoculars the eyes of the ship when one stops to consider how difficult navigation or racing would be without their use, and it is needless to say that every yacht should be properly equipped with good glasses. But how many yachtsmen know what qualities are necessary in a good binocular and what type should be used for marine purposes? When a yachtsman buys a boat he is very particular, but when he purchases binoculars for his boat he is inclined to accept the recommendation of salesmen.

If a high price is paid for a well-known make of glasses, in all probability he will get a good glass and a good buy, because the best in binoculars is the cheapest. But if he is contented with a cheaper binocular because it is advertised as having magnifying power equal to a twice-as-expensive glass, he will make a costly mistake, because magnifying power is not the criterion of a good binocular. The point of this article is to explain what should be looked for in a good binocular and to guide yachtsmen in the selection of this important and necessary aid to navigation.

The magnification or power of a binocular is the number of times the object in view is larger or nearer than the object appears to the naked eye. Magnification is a comparatively easy characteristic to obtain in binoculars and that is why cheap glasses are advertised as having the same power as the more expensive ones. Practically any desired magnification can be obtained by placing lenses at the proper distance apart. It is the other qualities of width of the field of view, clearness to the edge of the field, depth of the image, illumination, and lack of prismatic or rainbowing effect that go to make a good binocular. Fortunately, each of these qualities can be readily detected in a binocular, especially by comparing cheap glasses with good ones.

A good binocular for marine use should have a wide field of view because of the difficulty of holding a glass perfectly steady on a moving deck, which makes it impossible to keep the object centered in the usual small field of a cheap glass. With a small field of view, it is practically impossible to search the horizon effectively.

However, a wide field of view is useless unless it is clear and in focus right out to the circumference of the lens. A poor glass may show the objective clearly enough through the center portion of the lens, but everything seen near the edge of the glass will be fuzzy and indistinct. This quality can be readily observed by focusing an inferior binocular on an object viewed through the center of the lens, and then moving the binocular so that the object is near the circumference of the glass. It will appear unmistakably indistinct. A good pair of binoculars, on the other hand, will show objects distinctly in all portions of the lens.

Illumination means the amount of light that the binocular will gather from the object in view. A poor glass will give a dull view because the cheap lenses absorb the light. A good binocular lens is designed to have a minimum of absorption. Maximum illumination is particularly desirable for marine use on dull days, under early morning and evening conditions, or in night work.

Depth of view or stereoscopic effect is the quality which shows the objects in view at their respective distances from the observer. A poor glass makes everything viewed appear flat, making it impossible to judge the distance between objects in view. In navigating a channel where buoys must be picked up in the distance ahead, stereoscopic effect is essential; otherwise the buoys would appear equidistant from the boat and, in not knowing which to steer for first, a serious mistake might result.

Prismatic or rainbowing effect is prevalent in poor glasses and absent in good glasses. If you look along the edge of some object through a poor glass you will notice that it shows a strip of rainbow colors and is not clean-cut and definite. At night, in attempting to determine the characteristics of a light, a poor glass may show a white light red, or vice versa, because of the prismatic effect.

The alignment of the lenses on both their optical and mechanical axes is absolutely essential and calls for precision adjustment of the highest order. A binocular may be tested for alignment by setting it on a stationary rest and focusing it on two crossed lines, about three feet long, placed at right angles on a wall about one hundred feet from the binocular. If the glass is correctly aligned a single image of the lines will appear. If it is out of alignment, two images of the crossed lines will be seen. In order to insure correct alignment, the lenses must be carefully and securely mounted in the binocular, and not merely pasted in place as is done in inferior glasses. The slightest jar may upset the alignment and, there-

(Continued on page 78)

M. Rosenfeld

Sunlight and Shadow

"Betsy Bly," Atlantic Coast one-design, coming to the finish line in the opening regatta at Larchmont. The cabin is unusual in these little boats

Light Sails

Schooner "Westward" racing in the Solent. This famous Herreshoff schooner, now owned by T. B. F. Davis, has had keen racing with the larger cutters in British waters for some years

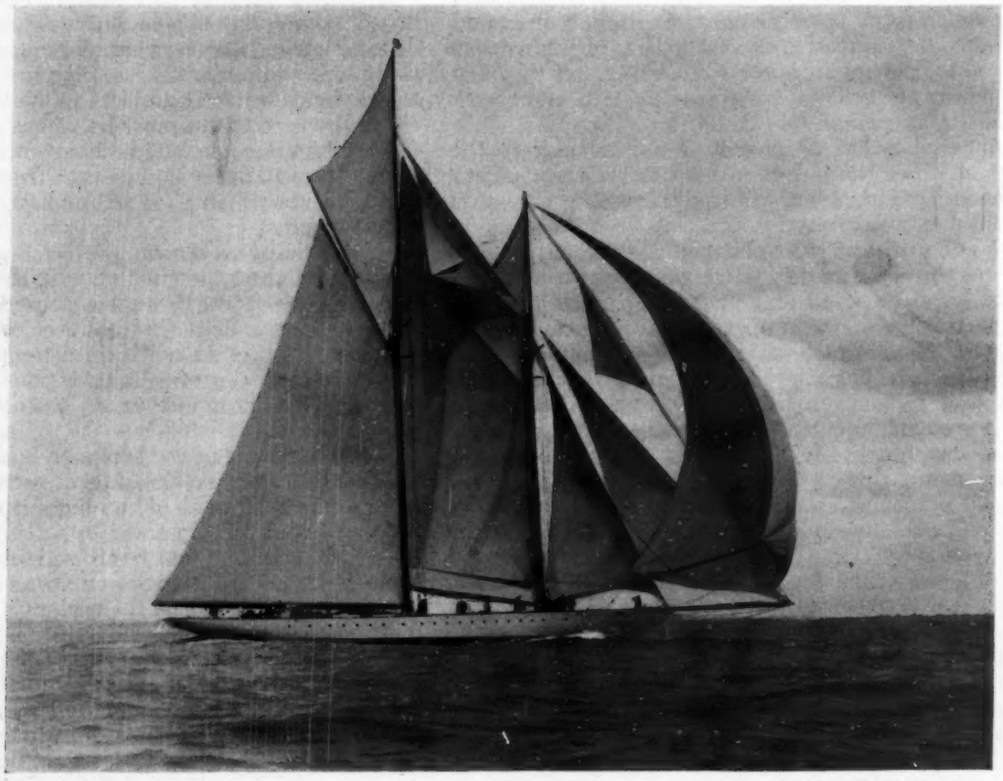


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Photo by Mrs. Hal Redman

Cruising in the North Channel, Georgian Bay

Looking across Mary Ann Anchorage, off Narrow Bay, east of Little Current, Ontario

Edith S. Watson

The Sailmaker

An art that has become almost extinct at sea with the passing of the square-rigger

The whaler "Morgan" "on the Grounds." From a painting by Frank Vining Smith which was won for the New Bedford Yacht Club for the coming year

"Inverness" Wins First Whalers' Race

By GEORGE SISTARE, JR.

REPRESENTING the New Bedford Yacht Club, Dr. John MacDonald's Casey-designed ketch *Inverness*, of Falmouth, won the initial Whalers' Race in competition for the newly offered Commodore's Trophy which will thus remain in the custody of the New Bedford Yacht Club for the coming year. In the class for racing boats, Dr. P. E. Truesdale's converted Class Q sloop *Manatauqua* won rather handily over the Fisher's Island sloops *Wild Goose* and *Savage*.

Starting from anchor at 10.00 A.M. on June 11th, the racing fleet carried a light westerly with them to the Noman's Land Whistling Buoy. More than half the skippers chose to buck the tide through Quick's Hole and the mouth of Vineyard Sound, while the remainder took the somewhat longer course around "the Pigs" lightvessel, banking on a shift of wind to the southward. As it turned out the wind held tenaciously in the west and the Quick's Hole contingent secured an early lead, *Malolo* and *Mandalay* leading the cruising boats, and the Fisher's Island sloops leading the fleet, at the whistler. At the time, there was good visibility, a ten- or twelve-knot breeze just to the south of west, and a smooth sea.

The course from Noman's to Block Island is approximately W. by N., hence the boats strapped down at the buoy, making good on courses which, if held, would fetch them in toward Point Jude. Most of the boats reached the island by nightfall, and most of them stayed there during the greater part of the night. The skippers were given the alternative of rounding the island in either direction, most of them choosing to go to the southward to take advantage of the tides. Here, however, all further choice stopped, for the wind moderated rapidly after sunset and it was a case of wind hunting all night. Leads were won and lost time and again, and the tall-rigged *Manatauqua* worked ahead of the fleet.

At daybreak, the wind freshened from the sou'west and the leaders set light canvas and scooted for home. Neither *Savage* nor *Wild Goose* could catch *Manatauqua*. Well astern, *Inverness* was overtaking *Mandalay* and *Malolo*, the leaders in her class. *Mandalay* she soon passed and while she did not catch *Malolo*, *Inverness* won rather easily on corrected time.

Thus the first Whalers' Race, over a course of 104.5 nautical miles from South Dartmouth to Noman's, to Block Island and return, was sailed and won — or lost. Plans are underway for next year's race, and it is hoped that an even larger fleet of cruising craft will compete for the trophy, an oil painting of the whaler *Morgan* "on the Grounds," done by the marine artist, Frank Vining Smith.

The summary is as follows:

CLASS A — CRUISING CLASS

Boat	*Owner*	*Elapsed Time*	*Corrected Time*
Inverness	J. MacDonald, Falmouth	25:43:10	24:52:39
Mandalay	F. V. Smith, Hingham	25:50:00	25:03:41
Malolo	F. T. Moses, Providence	25:39:50	25:39:50
Abaco	R. Bird, Marion	28:46:00	28:07:59
Raven	G. & D. Goff, Barrington, R. I.	T. N. T.	
Menikoe III	J. P. Bullard III, Bridgeport	T. N. T.	

CLASS B

Manatauqua	P. E. Truesdale, Fall River	24:44:00	24:44:00
Wild Goose	C. B. Rockwell, Jr., Bristol	25:14:45	22:55:55
Savage	R. Grinnell, Providence	25:19:30	25:00:40

The New Member

He Sails His First Race

With Apologies to Sam Pepys

By WAVELL URRY

UP BETIMES and to the office where my friend Mr. H. O. Wetherhelm, it being Saturday morning, did invite me to race with him in his yacht the *Windstealer*, she being a very wonder to go, I am told. A little after noon, by car to my house where I did on a new blue jacket with brass buttons, and cap, all very brave, also a light creamy breeching, most smooth; although I do think the tailor to be a great robber.

To the club, and here Mr. Wetherhelm did make me known to many gentlemen, all in discourse. I feared me to be put out of some countenance, for the talk was matter of which I was ignorant, but made resolve to become better acquaint with the sport. Mr. Halliard, Mr. Winch, my friend, and the Commodore, Mr. Brightbrass, were most courteous, clapping me upon the shoulder and saying each would be mighty glad to have me with them (meaning in the race), but being pledged to my friend, I could not, though very pleased. We took food, having much small talk and merry jokes, but methought sometimes to my discomfiture.

The club is large, many good carpets and chairs, also pictures, though I thought not so good as from the outside one would think. There were many ladies, some most lovely, but Lord how they do paint and fuss with powder that it quite spoils them. I made bold to speak with one and found her most apt, having such knowledge that I never dreamed of in the sailing of boats. It vexes me to be thus put about by a woman and I do intend to fathom this great sport that makes sober men into such merry clowns. Out of the windows the company can look over the port and the yachts, some making sail and others going about in all ways. Very pretty to look upon.

But presently come we to the float, and here a tender for the *Windstealer*, lying out, and a mighty fine sight. Yet what a great to do of lines and the pulling upon that I despair of learning. Some of the crew were hoisting of a great sail, and being come aboard presently, Mr. Wetherhelm, taking a long stick that steer the vessel, gave divers orders, whereupon divers of the people did hoist up two sails, these more forward than that above our heads, and the yacht began to move, but smoothly, it being hard to come by to tell the start of it. I, being fain to learn the trick of all this did watch the yachts. They go upon the wind by a trim of their sails, and falling first upon one side and then the other, make into the eye of the wind, and this very marvellous to behold. It seems that certain rules there be about who has the way of it. A pretty judgment. Quite soon, up comes Commodore Brightbrass in his yacht *Mugtaker*, very close, and Mr. Wetherhelm, shouting over, lays a wager that the *Windstealer* will be first about the weather mark, which we do think to be right, Mr. Wetherhelm telling me that *Windstealer* does well in a breeze, yet the way *Mugtaker* goes along decides me to lay no money down.

Came now a banging of guns and I in the middle of such confusion as I wot not of; a pulling of ropes and winding of winches; a consulting of stop-watches and Lord how my toes come to be trampled upon. And Mr. Wetherhelm came hot all over and shouted upon me to pull something, the which I tried, but only seemed to make him madder. Wherewith explaining, I saw but a far-away look come over his face as if his mind were to other matters, therefore desisted. Yet do I mind to think he owe me apology, and shall tax him upon it when this madness has worked off. But it abate no whit, he causing Stop-watch Bill to call out the seconds and others of the crew to wind a winch until I feared the strain would part something, and ill luck to us.

Such a crossing of sails there was that never would be believed, whereupon our sails shook the wind and we fell over to the other side full of a letting go and a hauling and more winding; yachts coming mighty close both before and behind. Then the gun, and four sails a-slant in one direction over ahead of us. Stop-watch Bill telling me *Mugtaker* is in the lead, followed by *Skyraker*, *Moontripper*, and *Binnacle Bat;* so we down after the Commodore, our fellows lying out in rows the better for the wind to pass above. Meantime Mr. Halliard and Mr. Winch go about to look up at the sails, telling Oly or Hans to sundry small jobs the which they tell me the yacht is the better for it, though how to tell is beyond me for I am taken upon the watching of the other yachts and fear me that some will be for catching us, the way they do tramp the foam.

Presently, and very sudden, the four yachts that be ahead do go about, or tack, as they call this falling upon the other side of the wind, and brings we in the *Windstealer* to painful argument. Mr. Halliard and Mr. Wetherhelm making to continue our going, whereupon Mr. Winch and Stop-watch Bill saying to go about, and very heatedly they were at it when the yacht *Sail Crowder*, which had been behind, come up very quick and we to luff, as they call a flying out into the wind to make confusion of them. This done the *Sail Crowder* had enough and took off, then Stop-watch Bill cried out to hold our tack, being in a trick of the tide to help us, and this was true. We foamed along very fast what time Oly heaved over a piece of lead upon a string, very cunning methought, Mr. Halliard saying it be for fear of the bottom coming upon us, though it did not, for we tacked and saw we stood in great way to advantage over the others, they now coming to the shore again. All in line, *Binnacle Bat* being past *Moontripper* and *Skyraker* to press *Mugtaker*.

We come close by *Mugtaker's* stern, crossing *Binnacle Bat*, but Mr. Brightbrass did not try for our wind, being of a mind to get the tide, and so also *Binnacle Bat*. Much difference of opinion now, Mr. Wetherhelm standing on, the others thinking it to be wrong, yet as we come about once more a flaw of the wind allowed us to look up and off for the mark at a great rate, being now in sight, wherewith our fellows busy themselves upon the lowering out of a great boom, a passing of lines and a hoisting of a spinnaker, as they do call it, all done up very neat. All this at some speed, for *Mugtaker*, on the opposite way of us, is to be seen doing the same. Then a shout, and on looking about behold *Binnacle Bat* gone on the ground, her people running to and fro,

shouting, and doing divers things that do amuse us, though I think it a pity, for I cannot see it to help her to the race much.

Skyraker and *Moontripper* come away following *Mugtaker, Sail Crowder* being well out of it. Then *Binnacle Bat* is all forgot, for the mark has come up to us and it do look to be that we and *Mugtaker* will be there together. I hold my breath we come so close, yet am told we have the way of it, but Mr. Brightbrass seems in no mind to give it, what time Mr. Halliard and Stop-watch Bill set up a shouting. Then we all did shout mightily, Mr. Wetherhelm saying it be always good to start first when in doubt, and at last Mr. Brightbrass (looking mighty sullen I thought) come around and we took the wind quite away from him and went about, he being all confused and much put to it saving his wind over the others, yet must needs follow us past the mark the which was passed to starboard, as is the way of saying, and I mighty vexed not to have made that wager, being now come from fifth place to be leading, in the manner I have writ.

Now as our spinnaker bellies into a big cloud our people gather to the stern and up come a steward and we crack a bottle, it being quaint custom among these yachtsmen for a bottle each time a mark be past. A pretty thing, so am I minded to continue this sport, whereon took the glasses from Stop-watch Bill and looked for the next mark. We all now very merry and fine discourse, having time to see that *Binnacle Bat* is on her way again with *Sail Crowder* close, but to think of being so out of it would leave me discomfited.

Winch and Halliard told some amusing stories, and right good fellows they are, very diligent for the sport. Mr. Wetherhelm told us of how when he was tacking upon another yacht and in the right, he began to shout, being his custom, but that it did no good, as sometimes happens, so finding himself to be put about wrongly, wrote a protest. Duly come before the committee, the chairman asks Mr. Rulebreaker (he being in the other yacht) if he did not hear Mr. Wetherhelm hail? Mr. Rulebreaker up and says no, he didn't hear him hail, but he heard what he said afterwards.

Whereupon I minded to tell them of an adventure that happened upon me while in the ferry that plies the harbour, very droll; they telling me I shall soon become a yachtsman, which pleases me greatly. Also am I constrained not to tax Mr. Wetherhelm, his sharpness to me at the start, of which I take he has forgot. His Scotch I find very fine, it now seeming to me I know more of this yachting than I at first supposed.

And now a shadow over our decks, causing us to look back, and there *Mugtaker* hanging to us so that our great spinnaker fell into folds, very sorry to see. "Blast it!" cries Stop-watch Bill, "this requires another drink," the while Mr. Wetherhelm tried to luff, but all to little purpose, for *Mugtaker* came close to our port side, Mr. Brightbrass and divers others looking too cheerful methought, so drunk a glass to their confusion. Mr. Brightbrass calls over to say the last yacht 'round the next mark gives a dinner, so Mr. Wetherhelm sends Winch and me forward, there to pull on certain lines, which done we make ahead some little. Presently Mr. Wetherhelm shouts out to let go something, the which we did in mighty hurry; but something broke, it seems, for our spinnaker, like a tired cloud come sudden out of the sky, lay into the water, bending the boom until fetching upon a stay, shivered in two — and lucky no one to be there.

But Lord! to see how a man take on so. Being poorly (it seems to me) to show so little control, for Mr. Wetherhelm grew all white and red in patches, his mouth to open and shut like a fish, but no sound come until he threw his cap away and then a great flood — while we all a-sweat a-pulling in of the sail, hard to come by for the weight of water and the speed. What time *Mugtaker* goes past, a merry crowd, with Mr. Brightbrass clapping hands to ears, mockingly I make no doubt, and calling about some dinner details.

By the time did clear all this mess, with broken spar laid along, we were slid back to *Binnacle Bat* and *Sail Crowder*, they coming upon us each to a side, with *Moontripper* and *Skyraker* before; which time *Mugtaker* goes about the mark and sets a mighty big ballooner. A sorrowful sight to us, but we console ourselves with the cracking of another bottle; which presently we do, going around in a squeeze with the others and a setting of our balloon that takes much winching, but such a sail to pull as I never did see. Some banter now, upon the manner of our falling to pieces. This from the other yachts, and Mr. Wetherhelm mighty sulky, what time we argue the way of it, though to little purpose, Halliard and Stop-watch Bill seeming to think something was let go wrongly. Mr. Wetherhelm brightens when *Binnacle Bat* fetches close, he shouting remarks about them making to change the coastline. "Where do you carry your lead-line," asks he, "in the guests' stateroom?"

"Our lead-line is O.K." replies *Binnacle Bat*, "but the lead wouldn't sink."

And now the wind begins to blow more strongly, fearing us for something more to break, yet cheerful, for the *Windstealer* comes into her own, leaving the others and coming upon *Moontripper* and *Skyraker*.

So now we upon the cushions once more and a clinking of glasses, Mr. Wetherhelm something forgot of the accident and mighty intent to *Mugtaker*, that seems not so much to be ahead as we at first did think. Some discussion upon our business of overtaking *Mugtaker*, for Halliard tells me we do well into the wind which presently we shall come by, having saved it over the others, they making great fuss close to us. A pretty sight, what with all the movement and the way the water go. Stop-watch Bill takes up the glasses, telling us the way of the mark, so better to steer, what time we do approach *Mugtaker*. Mr. Brightbrass is now easy to see, squinting 'round to look how we come and upon the ordering of certain business, causing divers of them a-looking to the sails and we mighty uplift for the way their plainness grows. Winch says he be sailing out of the wind and all of us a-coming up, so will it be a race yet methinks.

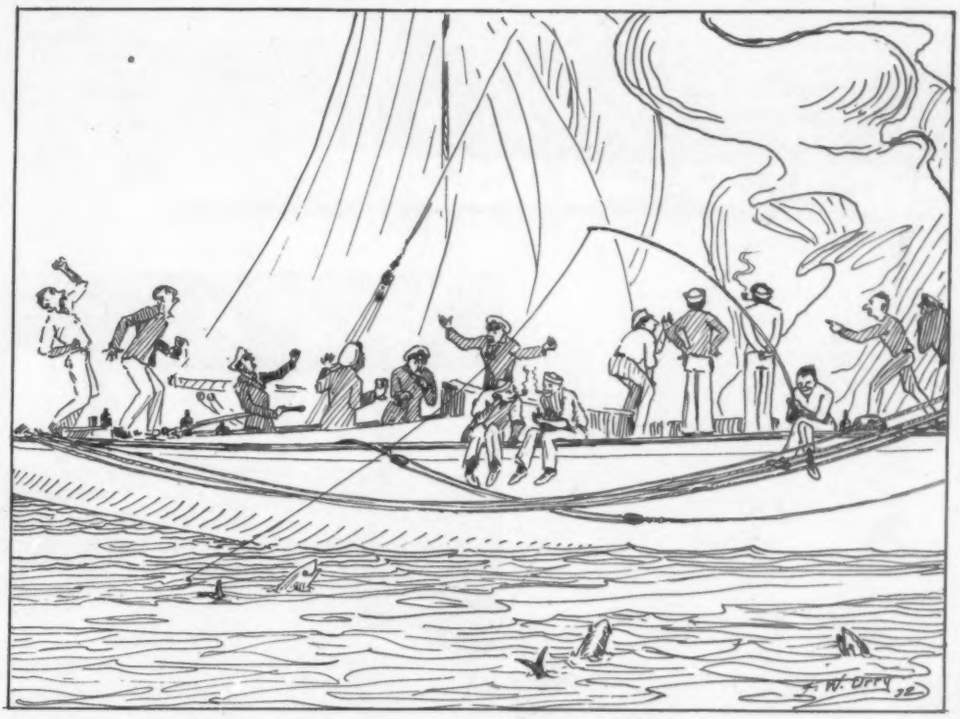
Indeed and this was so, for up we all be soon, to make out the name upon the counter, all aboard mighty serious to their business, and I did rejoice, for here was another mark, so look to see the steward again. *Mugtaker* goes 'round with *Windstealer* close on to barely miss, and nobody speaking, only looking each upon the other like a kind of spell, till someone says, "How about another drink?" Then a laugh and jokes what time Wetherhelm and Brightbrass look mighty solemn to the way they go. "Well! didn't think to see you back," says Brightbrass. "Take that," and so swipes into the wind. Needs must we follow, our sails all a-shake, causing *Moontripper* to be the same. But it do little good for bear we down again, to a nice levelness, and so for the line where a great to do of craft and flags a-going. A brave sight.

Now, I do know this game has me in its toils even though I would not, for a great tightness come to my throat, all the while a-hopping upon one leg or the other, yet could speak no word and wish to urge the ship to go, for we know not who has the better of it. Then the gun — tension suddenly broke — with Stop-

watch Bill glaring at his dial, counting — one — two — three — four — then looking up in puzzlement. "What!" says he, "no gun for *Mugtaker?*"

"Hell," Wetherhelm grunted, "missed fire I guess, just like 'em."

So we to our moorings, what time guns bang for the rest of the fleet, our discussion being upon the manner of time we did beat Brightbrass, and the way of committees, which is strange, according as Halliard and Winch have it, they doing divers foolish things. I am resolved to look into this, for minding that a committee do strive to please many, it may be harder to come by than some be giving credit of.



"Our spinnaker, like a tired cloud come sudden out of the sky"

Mr. Wetherhelm, in high spirits now, saying to go aboard the Commodore, so calls up myself, Mr. Halliard, Mr. Winch and Stop-watch Bill, what time Oly and others busying about the putting of a boat in the water.

Presently come we to *Mugtaker*, Brightbrass making us known to divers gentlemen, among others Mr. Allbright, Mr. Lustre, and Mr. Sheen. Then below, most spacious, where a board, and stewards upon the serving of food and a steaming punch. So we all quite merry, but presently Lord! what discussion and cross purpose of opinion as little I dreamed of, being all started by Mr. Brightbrass saying he was sorry *Windstealer* got no gun. "But as far as I can make out," says he, "you lost the race by about three seconds; too bad."

"Too bad!" echoes Wetherhelm at the top of his voice, "too bad for *you*, you mean; 'twas *us* had the gun."

Brightbrass looks to him sadly, shaking his head; meanwhile we all in such discourse, very heated, and hard to tell the manner of it till around to speak of the committee, Brightbrass catching upon the word.

"Ah! the committee," he cries, rubbing his hands, "how now steward, the bowl is empty man, another punch. Yes, the committee," he repeated, "we'll boil them in oil." Then we all upon our feet a-clinking glasses, to drain them bottoms up, and sung a song, something thuswise:

"The Committee! the Committee!
We'll boil them in oil
Shalt stand for 't? no prithee
We'll boil them in oil!

Who is it have their guns misfire?
Who is it raise our righteous ire?
Who is it bungles all entire
And make our sport to spoil?

The Committee! the Committee!
We'll boil them in oil."

"That you will not, gentlemen," came a suave voice from the foot of the companion; and we all standing mumchance what time he come up and helped him to a bumper; not so much as by your leave, a very smooth person. A Mr. Trigger, as it turned out, being but come aboard that moment. "That you will not," says he again. "Be it known the committee have laboured to make this race great success, only to have it utterly put out (turning towards Brightbrass and Wetherhelm) by you two futile flops."

"How so? how so?" cry we, finding voice of protest.

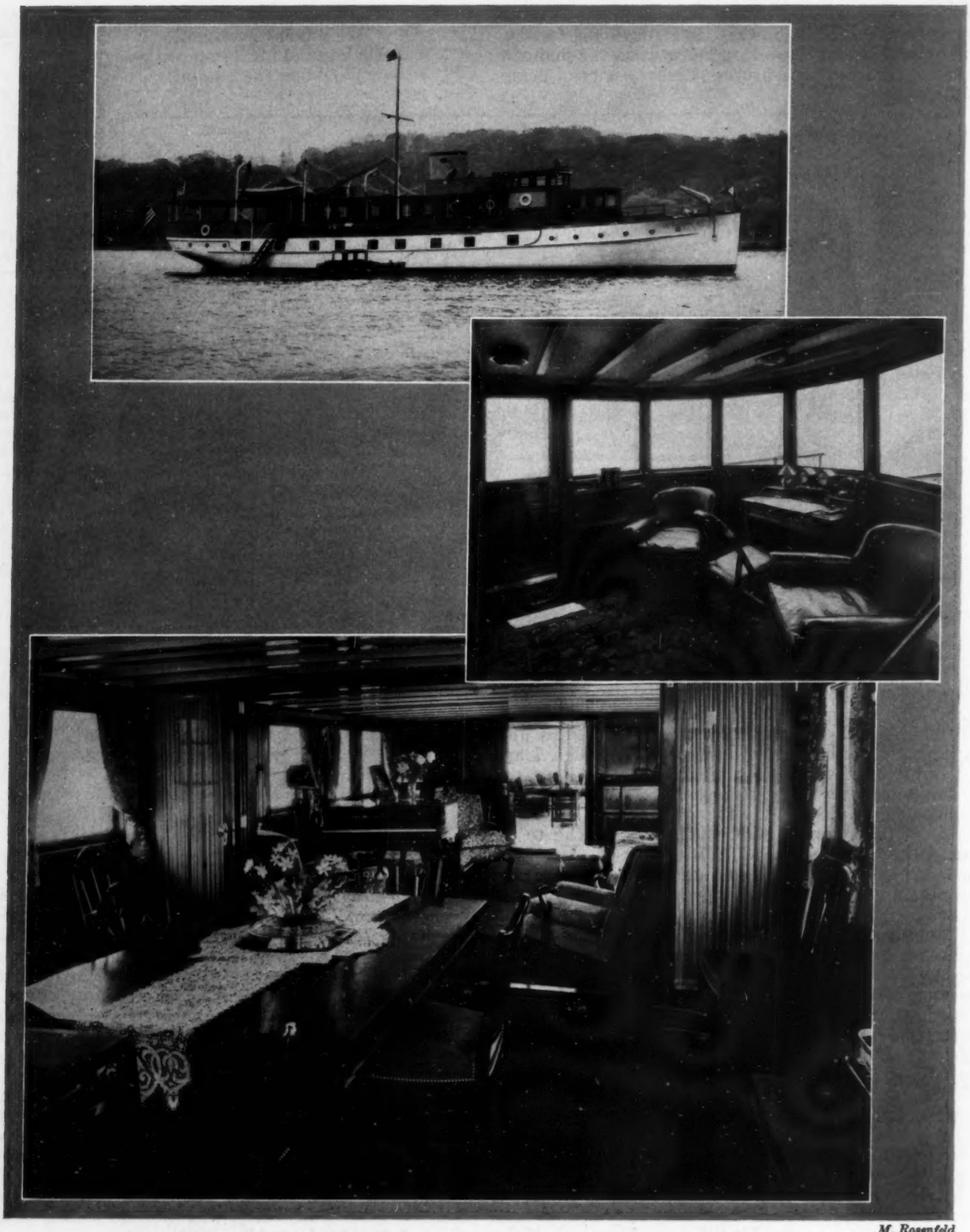
"How so?" quoth he, "any but the thick-headed afterguards and skippers of racing yachts would have guessed by this. However, I have the honour to inform you that no split second divided the yachts — one gun to both. As to the trophy, the committee wash their hands of all responsibility, what you do with it is now your affair. Also I would say —"

"If you are going to make a speech," interrupts Wetherhelm, "condense it man, condense it."

Trigger looks him over with a cold eye, "You are al-

(Continued on page 86)

"Veruselle"—108-Foot Diesel Cruiser



M. Rosenfeld

One of the few large yachts to be launched this year is the "Veruselle," owned by John R. Hopkins, of New York. Designed and built by the Mathis Yacht Building Company, she combines the comforts of a houseboat with the looks and ability of a yacht. The large deckhouse provides spacious living quarters, consisting of a dining room, large lounging room, and a smoking and writing room in the forward end. Power is supplied by two 6-cylinder Winton-Diesels

The Bahama Sharpshooters

A Development of the Keel Catboat

By H. I. CHAPELLE

THE Bahama boats, as a whole, are poor craft; nevertheless, there is one type that deserves our attention. This type is found around Eleuthra Island, and is well known in the Bahamas for its speed and handiness. Eleuthra once had a great fruit-raising industry of which pineapples were the principal crop. Now this is gone, and the inhabitants engage in fishing and sponging, though a little farming is still done.

A glance at the chart will show Eleuthra to the eastward of Nassau, the capital and metropolis of the group, on New Providence Island. This island is separated from Eleuthra by the northern portion of Exuma Sound and the bight formed by the Keys to the northward, called "Cochrane Anchorage." To the southeastward of New Providence there is a great stretch of shoal and dangerous water, studded with coral "heads" and reefs. These waters are often very rough. The weather varies from flat calms to the wild West Indian hurricane, the prevailing winds being the strong easterly Trades, with occasional hard northers during the winter months. The poverty of the people on Eleuthra does not permit their employing large vessels, or power craft, hence they have had to develop a small and inexpensive, but seaworthy and weatherly sailboat.

About eighty years ago, sometime in the fifties, a Staten Island boatbuilder named Benjamin Morton became ill, as a result of which he was ordered by his doctor to take a sea voyage. As winter was coming on it was suggested that he go to the West Indies. At this period there were a number of fast schooners carrying fruit from the Bahamas and the other West Indian islands to New York, so Morton found it cheap and convenient to take passage on one of these vessels. It happened that the schooner on which Morton took passage was bound for Tarpum Bay, Eleuthra Island, a small settlement on the western side of the island.

On Morton's arrival there he went ashore and, while the schooner was loading, he explored the island and adjacent waters. He found the climate and the planters so much to his liking that he decided to settle there. Returning to Staten Island, he sold his business and home and, with his family, came back to Tarpum Bay where he purchased land, built a house, and settled down to the life of a West Indian planter.

Living in the Bahamas without a boat is a great handicap, as Morton soon decided. Carefully considering weather and water conditions, he modeled a small sailboat to suit them, and his own requirements as well. He had spent enough time in the islands to know exactly what he would need; he liked to fish in Exuma Sound, he had to have a handy ship and one that could be safely worked single-handed. The boat must be large enough, however, to carry passengers and produce to Nassau; this meant that she would have to meet possible bad weather.

Morton built, therefore, a keel catboat, rigged and modeled somewhat like the local dinghies, but larger, deeper, sharper, and more able. This boat was about 36 feet long on deck, and is said to be still afloat. She was named the *Sharpshooter* and was an excellent sailer. Her good qualities were so evident that Morton's neighbors begged to buy her and finally one, a negro, was able to buy her, to the disappointment of the others. These prevailed upon Morton to build them similar boats, with the result that a new Bahama type came into being, and, because the first boat had become so well known, this type took the name "Sharpshooter." Morton's practice was to build these boats, of varying sizes, on speculation, and to try them out himself to obtain the proper trim and ballasting before selling them. They ranged in length on top from 18 to 40 feet, all having the same general lines and rig. Locally, the Sharpshooters are often called "Sharpies," or "Sharps," and are used throughout the Bahamas today.

In model, the Sharpshooters, in their underbody profile, particularly, show the influence of the old Baltimore clippers, and also the influence of the local dinghies, which are like the old ship's boats. The rig of these dinghies was described in an article in YACHTING a few years ago, written by the then commissioner at Andros Island, Mr. E. W. Forsyth, and this rig is still the most common in the islands. The Sharpshooter's rig is exactly like that of the dinghy's in most cases; a single loose-footed leg-of-mutton, set on a somewhat raking mast, and spread with a boom and outhaul, cutter-fashion. These sails are always fitted with a large headboard and have tremendous roach to the foot.

The hull has a good deal of deadrise and much drag to the keel. The greatest beam is a little forward of amidships, and there is usually a strong sheer. The stem is straight and raking, the transom is like that of a ship's boat, and rakes about twice as much as the stem. The mast of a Sharpshooter has more rake than that of a dinghy, has no shrouds or stay, and is a heavy stick, of yellow pine.

On certain occasions a large number of Sharpshooters gather at some town on Eleuthra and race to Nassau. A thrash up against a hard norther always proves popular. These boats are at their best when working to windward against a heavy sea and a strong breeze. They steer well off the wind, being an improvement on the usual centerboard catboat in this respect; they sail very fast on a reach, and show to advantage when paced by a cruising yacht of the same length and displacement. The Bahama boats are usually so run down and have such worn-out and neglected sails and gear that it is only on rare occasions that one is able to obtain a fair idea of their qualities. The only objection to the keel catboat is the difficulty of getting them out of irons without a knockdown, which, though not dangerous, is disconcerting. If a centerboard cat inadvertently gets into irons, two courses are open in order to get out; if the wind is light the helm is put over and the boat allowed to gather sternway so that she comes around on her helm. In a strong breeze, however, this is followed by a knockdown. This maneuver is what must be carried out in a keel cat. In the centerboarder, however, it is better to raise the board and let the boat swing around on her skeg, taking care to handle the mainsheet at the same time and so avoid a knockdown. Obviously, a knockdown in a well ballasted keel cat is not as potentially dangerous as in a centerboarder.

While in the Bahamas in 1924 I attempted to get a half-model of a Sharpshooter, but without success, as the builders were away the day I was in Tarpum Bay. However, I did get some measurements and notes and recently a friend in the islands procured the take-off of a half-model for me, as well as very complete measurements of the Sharpshooter shown in Figure 1. This boat was fairly old, and was supposed to have been built by Felix O'Neil, of Tarpum Bay. She has a somewhat sharper entrance than most Sharpshooters, and was a fast boat. The Morton family still lives on Eleuthra and still builds Sharpshooters, I believe, but I have not seen any recent boats built by them.

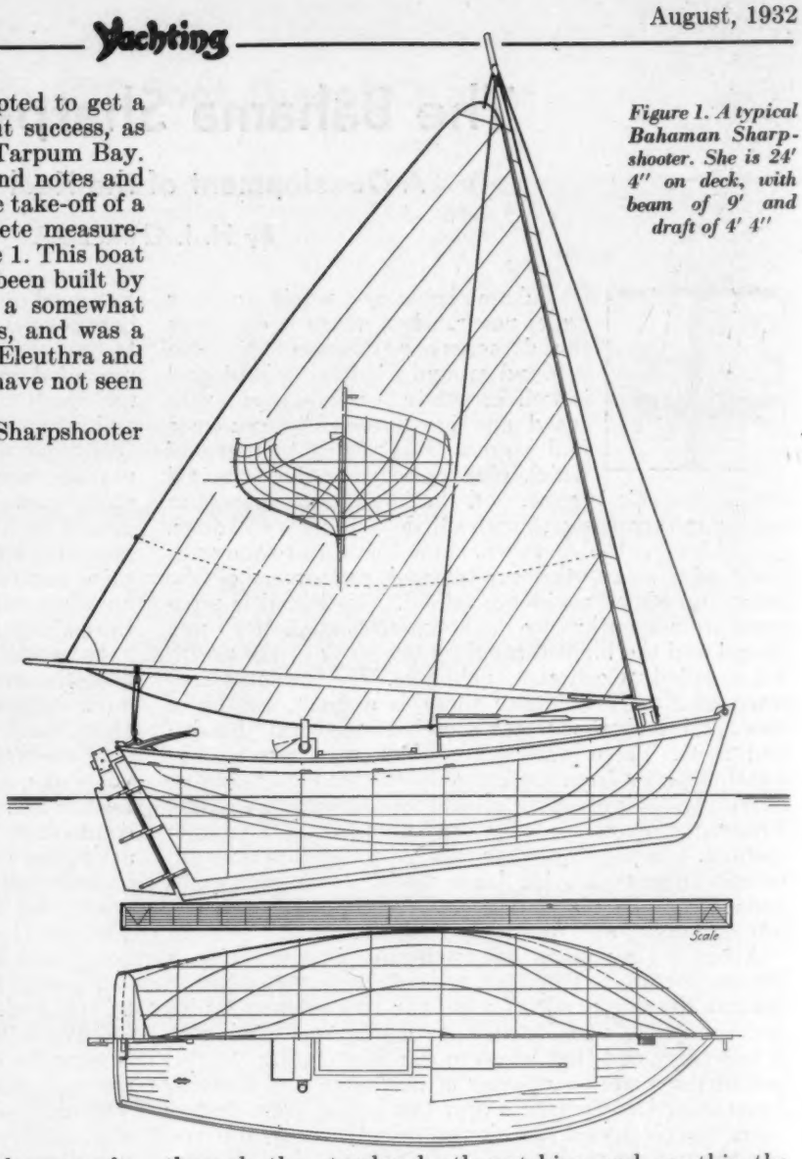


Figure 1. A typical Bahaman Sharpshooter. She is 24' 4" on deck, with beam of 9' and draft of 4' 4"

Figure 1 shows the above-mentioned Sharpshooter and may be accepted as typical. She is a small example of the type, 24 feet 4 inches long on deck, and 9 feet beam. She draws 4 feet 4 inches when in her best trim. The proportions, as illustrated in these dimensions, seem to apply to Sharpshooters of all sizes, though there is often a slight reduction of beam in the larger boats. All the Eleuthra-built Sharpshooters have the planked-up deadwood, but the Nassau-built copies often have a skeg instead; it is claimed that this prevents fast sailing. The Bahama builders, when speaking of length, refer to length on the keel rather than length on top. Therefore, the length of this boat is described as being "20 feet," instead of 24 feet 4 inches.

The lines show a hull with a very long run, combined with a short, hollow entrance; the greatest beam is well forward, which tends to form a somewhat marked shoulder at a point just abaft the third station from the bow. Nevertheless, the hull is well formed for speed, provided the boat is not sailed at too great an angle of heel. Usually, the hull is a well balanced one and is easy to drive. The model is seaworthy, and should be quite stiff.

The deck layout is typical of the small Bahama craft. There is a small portable trunk forward, over the forecastle, which can be unshipped to convert the forecastle into a cargo hold. There are usually no berths in the forecastle as the crew bunk on the floor, or on deck. Abaft the trunk there is either a fish well or a cargo hold, access to which is obtained by a small hatch. There is no cockpit; these craft are flush aft, which makes them uncomfortable to steer. The galley is on deck, and usually consists of a charcoal pot, a sand box, or an old-fashioned deck stove. This last is an old institution in the West Indies; it is of sheet iron and looks like a miniature piano case, with openings at each end for sheet iron stove pipe and elbow. The windward opening is usually covered by a hinged cover, there being one at each opening. Some have a hinged cover over the front as well. The pots and pans are slung from hooks and cranes located at the top of the hood, and the bottom of the stove is covered with sand and bricks. Cooking in this range is like cooking in an open fireplace. Charcoal is the popular fuel in all these galleys. The deck galley is usually placed abaft the hatch, or between the trunk and the hatch, unless the trunk is aft, as is sometimes the case in the larger boats, the galley then being placed just abaft the mast. The mast is stepped on the stem knee and is often square at the partners. It has a strong rake which brings the partners well aft. The stemhead is carried high above the bulwarks; an iron pin is driven through the stemhead athwartships and on this the halliard and the mooring cable are belayed as required. This is reminiscent of the old Essex-built Chebacco boats. All the Bahama craft, except some of the very large schooners, steer with a tiller.

The rig is extremely simple. There is but one halliard, which is belayed to the stemhead and acts as a forestay. The mainsheet is single and the deck block is mounted on a short iron horse on the transom. Some of the larger Sharpshooters have a standing toppinglift. A running lift would be an improvement. A tricing line, reeving through a block aloft, is used to trice up the foot of the sail, the fall belaying to a cleat on the mast, or on deck. A single-part outhaul is employed on the mainboom. The tack is sometimes secured to the boom, but this tends to cause the boom to lift. A better plan is to secure the tack to an eyebolt on deck. In the smaller Sharpshooters the sail is laced to the mast; in large boats mast-rings are used.

The advantages of the rig may be summarized as follows. A much shorter mast is possible than with the modern leg-of-mutton rig; no shrouds to be set up and watched, and, due to the rake of the mast, the center of effort does not shift so much in reefing, which makes for easier steering in heavy weather. One objection to modern leg-of-mutton rigged catboats is their lack of balance when reefed, which could be largely overcome by raking the mast as is done in the Sharpshooter.

Reefing, in the Bahama rig, is easily accomplished by tricing up the foot. The sail can be scandalized by letting go the tack and tricing up the sail. Of course, this does not look well, but it is certainly handy. A reef may be put in, in the usual manner, if desired, as there are generally one or more lines of reef points. If properly cut and made, the sail sets well on all points of sailing, and is efficient. The chief objection to this sail is the inability to see to leeward unless the sail is triced up. Another objection is that it is necessary to lift the foot of the sail over the top of the trunk, due to the excessive goring or roach of the foot. Both these objections can be overcome by cutting the sail higher, thus raising the rig.

The sail is made of rather heavy canvas, and the roping at the foot is heavy. The tack and the clew are strongly patched as there is a heavy strain on the lower portion of this type of sail. The headboard is made of two pieces of plank, one piece on each side of the sail, through-fastened, the roping of the sail going over the top of the headboard. The halliard is spliced into a hole bored through all. The reef cringles are also heavily patched and reinforced.

The construction of the older boats was rather good in strength and finish, but, with few exceptions, boats built during the last thirty years are very poor, and are very roughly finished. They do not compare with boats built in the States in these respects. No steam bending is to be seen in the frames; sawn frames are employed in all Bahama types, from the 13-foot dinghy to the three-masted schooner. In the dinghies and the Sharpshooters the frames are of madeira, known also as "horseflesh." In small craft the frames are often single, but double frames are the most common. Some have no floors, but most do. The frames are widely spaced (18 inches on centers in the example) and are rather heavy in scantling. The construction differs little from that employed in small schooners, except in size. Planking, deck, deck beams, trunk, keel, transom, stem, mast and boom are of yellow pine, as a rule; everything is of large scantling. Sometimes the stem is of madeira, and occasionally frames are made of black mangrove. Oak is not employed as it is subject to dry rot in this climate. Fastenings are of galvanized iron, though the older and better boats were copper-fastened. White topsides, with a seasick green trim and bottom, is the most common color scheme.

The small Bahama working craft are owned and manned by negroes, to a large extent, and while these men are good boatmen, they are not good seamen in so far as having any pride in the appearance of their craft is concerned. The great loss of life that occurs periodically is not due to the poor models of their boats, nor, largely, to the weather and water conditions, but to the carelessness and shiftlessness of the negro sailor. The boats are rarely painted, are usually leaky, and invariably have rotten gear; hence they are often in trouble. The Bahama craft were at one time a fine lot, as the early Sharpshooters and turtle-schooners still afloat show, but the increasing number of colored builders and sailors has caused the various types to degenerate. The general poverty of the fishermen and spongers has necessitated their building boats as cheaply as possible, which is a contributing cause to the degeneration of the Bahama types and the numerous losses in the fishing and sponging fleets each year. To illustrate the low cost of Bahama boats, the price quoted me for building a 22-foot (keel measurement) Sharpshooter, in 1924, was $250 (at Abaco). This was for the boat complete. At this price one should not expect much, but, even so, the price was ridiculously low.

In a calm, these Sharpshooters can be sculled along at a good clip, once they get moving. I was told, after the hurricane of 1926, of a negro who sculled a 28-foot Sharpshooter two days and one night without stopping, after his boat had become dismasted, because he was afraid that if he stopped he would not have enough strength left to get her moving again. I have seen these boats sculled "twin screw" by two men, by means of sweeps on each quarter. The boat moved at a greater speed than I could row a dinghy.

This type appears to offer possibilities as a yacht. Figure 2 is an attempt to improve upon the original type with the idea of procuring a safe and easily handled single-hander for use in exposed waters. At the same time, care was taken that the cost of building would not be unduly increased; hence outside ballast and a stern overhang were omitted. The rig was raised to overcome the objections previously noted. This made it needful, I thought, that the depth be increased slightly and the inside ballast lowered, and necessitated a slight hollow in the floors, which will make the boat a little easier to plank, as the twist in the garboards is lessened somewhat. The point of greatest beam was moved slightly aft to remove the shoulder seen in the original hull, and the rig, therefore, was moved aft and the forefoot rounded off to bring the centers into proper relationship again. I think I have improved the

(*Continued on page 82*)

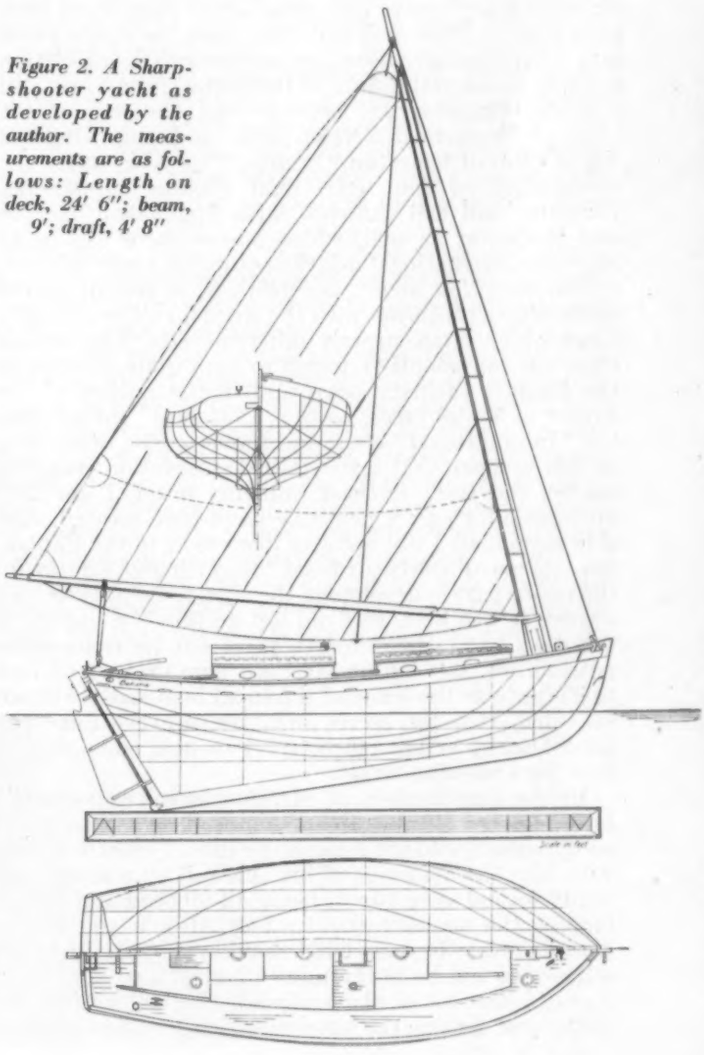


Figure 2. A Sharpshooter yacht as developed by the author. The measurements are as follows: Length on deck, 24′ 6″; beam, 9′; draft, 4′ 8″

A modern 14-foot racing dinghy with jib-headed rig, plank boom, and all the latest gadgets

Those Fourteen-Foot Dinghies Again

By

JOHN S. BARNES

WHEN is an International Dinghy not an International Dinghy? That sounds like a schoolboy's riddle, but it is a question I've been asking myself ever since reading the June issue of YACHTING. Both Mr. E. G. Macrae and "Cap Stan" (alias "Dinghy Dan") have objected to the term when applied to the boats described in the February issue.

I might explain the use of the title by the fact that for some thirty years the boats of the class have been known as dinghies and that they have for many years past been regularly used for international competition not only between the clubs at Rochester, New York, and Toronto, Ontario, but between the Crescent Yacht Club of Watertown, New York, and the Kingston Yacht Club of Kingston, Ontario. This year, under the sponsorship of the Lake Skiff Sailing Association, Kingston will sail matches with Henderson Harbor and Rochester as well, which means there will be at least five international matches sailed on Lake Ontario.

The objection made, nevertheless, is sound, as the name causes confusion with the British 14-Foot Dinghy Class which is an entirely different boat. The British class was consistently referred to until quite recently in the English yachting press and in the notices of the Prince of Wales races, as the "National" rather than the "International" class, and I must admit that it was in this manner that I was misled. Confusion being, of course, the point farthest from my mind, I am duly apologetic for any which may have been created. And if in my article I did not give due credit to the Canadians, and particularly my good friend Charles Bourke for the major part in developing the class to its present high degree, it was because I did not go into the history of the class but rather tried to point out its tremendous possibilities. But let me say right here that we all look to Toronto as the home of the small boat sailor without an equal. It is the secret ambition of every Lake Ontario Dinghy skipper to be good enough, some day, to beat his Canadian rivals.

By the time this is read, Mr. Bourke will undoubtedly have received his new jib and mainsail rig and have had an opportunity to try it in competition. I have discussed with him the drawings of his new sail plan and it certainly looked very sweet, being all inboard and the jib lapping the mainsail about a foot. How it will behave yet remains to be seen, but I should judge that the chief advantage will be in the influence a jib has on the currents in the lee of the mainsail, eliminating harmful eddies and making the latter more efficient, as explained by Dr. Curry. Regarding balance, it is hard to estimate just what the effect will be, as Bourke's 1931 boat, with mainsail only, was as perfectly balanced as could be asked of any small boat.

Theoretically, of course, it seems logical to say that the helm will be eased going down the wind on a course carrying the wind enough on the quarter to allow the jib to be kept drawing. There is, however, a factor in the balance of small boats that does not seem to be concerned with sail plan or lateral plane. That is the tendency of the wave which piles up under the lee bow to drive the boat into the wind. In these light boats particularly, where the beam is great and the speed high, this lee bow wave exerts a good deal of force and it has been found, particularly while reaching, that it is necessary to shift the live ballast in such a manner as to keep the boat as nearly as possible on an even keel so as to minimize this wave and hence relieve the helm.

It is my belief, and I think that of Mr. Bourke, that this is the greatest influence tending to cause drag on the helm in these dinghies. Just how much the jib will combat this tendency, and whether or not a jib on a boat with practically all the bearing aft and so little forward, will have an unanticipated effect, are points which will be watched with interest. I assume a spinnaker will not be allowed and the rig will then be handicapped while dead before it by the loss of this area. Here, too, the balance is likely to be adversely affected, for the center of effort of the effective sail area will be farther aft; but any difficulties in this respect can, possibly, be overcome by shifting the live ballast and adjusting the centerboard. Mr. Bourke is making a valuable experiment, but until the facts are known, statements as to the value of the rig on these boats can be no better than an opinion.

"On the Canadian side of Lake Ontario," Mr. Macrae suggests the dinghies are an "out-and-out racing proposition." While this holds true in Toronto it is not true throughout the Lake, nor is it wholly true of the Canadian side, as the one-design boats so popular at Kingston, Watertown, Henderson Harbor, and many other places seem to be the nearest approach to the ideal combination of class racer and day sailer that I have seen. They are fast, yet stable, healthy boats, ideally adapted to the instruction of beginners. That they have produced wonderful skippers is demonstrated by the fact that the Kingston club has given the Toronto crews their most dangerous competition, and its effort has not been without reward.

I would also like to say of these one-design boats that efforts have been unusually successful in keeping the cost down. Their price in this country, new, is less than half of the price of the "out-and-out racing" boats, and a third of the cost of the British 14-footers. Mr. Macrae also indicates that the "out-and-out racing men" are thinking along the lines of a standard type of boat. In fact, after the failure of the Lake Skiff Sailing Association to adopt such a class, the Rochester Yacht Club dinghy sailors took the bull by the horns, drawing up and adopting a set of restrictions which will produce a hull very similar to the one-design boats. This from the club that has "forced the racing on Lake Ontario."

Turning now to "Cap Stan's" remarks, it is useless further to discuss the question of the "feel" of our boats compared with that of the utility dink, as this quality is one of the elusive and undefinable things that makes sailing such a fascinating sport. I do stand ready, however, to bring my one-design boat to the Sound at any time, not to race the Frostbite boats, but to give those interested an opportunity to sail her, and possibly to race her against something more nearly of her size and sail area.

The "Cap's" quotation from Mr. G. I. Pout's article in the *Yachting World* takes up the subject from a different angle. I am not so sure that the British International Dinghies could beat our boats twenty minutes on the Prince of Wales course, or could beat them at all, but I suppose there is little chance of putting the statement to a test. Discussing relative speeds of boats is very unsatisfactory without something quite definite to work on. If Mr. Pout does, "Cap Stan" does not give his times on the Prince of Wales course to substantiate his statements. On the other hand, I believe that Mr. Clifford Mallory, president of the N. A. Y. R. U. is not given to extravagant remarks and when he calls these boats "the fastest 14-foot dinghies on salt or fresh water," the statement must bear weight.

A comparison between the British boats and those of Lake Ontario, to have any value, must be made with a knowledge of the restrictions under which each class is built. These vary greatly. The former are allowed great latitude in methods of construction and in scantlings, while the restrictions of the L. S. S. A. governing the latter call for clinker construction with frames 1″ by ¾″ on 12″ centers, or the equivalent. The British boats have a minimum beam restriction of 4′ 8″ as against 5′ 7½″. The Ontario boats must have a minimum area of largest cross section of not less than 875 square inches and there is no restriction of this nature on the British boat. Neither boat is allowed ballast, but the English boats carry centerboards weighing as much as 140 pounds. Their boats must be entirely open and ours must have a deck with a minimum width of 8 inches, or, if open, 180 square inches must be added to the cross section. Their sail area is 125 square feet for ocean racing and 140 for inland lakes, as against our area of 140 square feet.

The result is that the British boat has developed into a double- or triple-skinned boat without framing. It is narrower, with much flatter floors and a much fuller bow than the Lake Ontario craft. They have hard bilges and a marked tumble home aft, contrasting with the soft bilges, flare to the sides and hollow lines forward, of our boats.

As to sailing the two boats, Mr. W. Maxwell Blake, writing in YACHTING for August, 1930, describes handling the British 14-footer in a manner which makes it sound very similar to practice in our boats. He emphasizes the team work of the crew and speaks of racks on the centerboard trunk, which, as do our hiking ropes, serve as a place for the crew to hook their toes so they may hang out to windward. He suggests a broad coaming for comfort's sake. This, combined with his, and other remarks referring to strenuous bailing, would indicate that our decked boats have real advantages. Mr. Blake concludes with his only complaint, that of cost.

It seems a great shame that there is little prospect of matching boats of these two classes in the immediate future, but all people interested in small boat sailing will take great pleasure in reading the concluding statement of Mr. Macrae's article in which he says that the matter of small boat classes is to come before the Canadian Yachting Association and the North American Yacht Racing Union. Such action is sorely needed and can come none too soon. Could we not have coördinated action on the part of the N. A. Y. R. U., the Canadian Association, the Lake Skiff Sailing Association, and the North American Dinghy Association? If it is not too much to hope, an international conference seems in order.

Small boat design in this country is, in the future, bound to reflect more and more European development, and the plea for internationally recognized small classes is coming from all quarters.

Could we not have a sail area class for experimental purposes, with design and rig which would be as inexpensive as possible, to encourage amateur effort? Also a closely restricted or one-design class for those who wish to get down to the business of sailing. Both classes should, I think, call for unballasted boats, and the latter would serve not only for international, intersectional, and interclub racing, but for intercollegiate, interscholastic, and junior championship racing.

It is hard for the uninitiated to appreciate the amount of work and time necessary to bring about such action, but the work should be started. The time is ripe.

From the Tank to the Motor

In Fuel Lines and Their Fittings, the Best in Material and Workmanship Is a Requisite

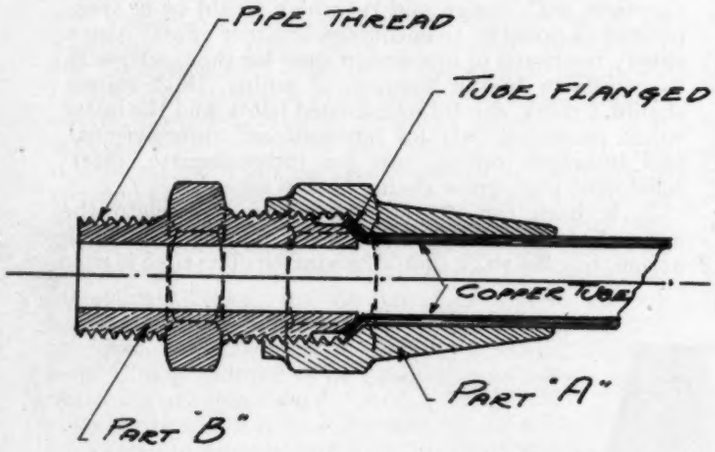
By GEORGE F. CROUCH

Chief Naval Architect, Henry B. Nevins, Inc.

SO OFTEN it has been said that racing is the experimental laboratory of the motor boat industry that I hate to say it over again. But the statement is the exact truth. Perhaps the shape of the hulls which are used in the cruising type of motor boat are not greatly influenced by the things we find out about the bottoms of racing hydroplanes, but there are a thousand and one other items concerning the detail of the motor installation and its fittings which apply quite as much to the cruiser or the auxiliary as they do to the racing job.

Racing is a severe test of the gasoline lines and any type of installation and any fittings which will stand up under the stress of racing — particularly such grinds as the 150-mile Sweepstakes, or even the three 30-mile heats of the Gold Cup — will be entirely satisfactory in any cruising type of boat.

Without boasting, I may say that I feel fully qualified to write about gasoline lines for I believe that I have had as much trouble with them as anyone in the game. Practically everything which, by the wildest stretch of the imagination, might go wrong has done so on one or another of the racing boats which I have designed. If there is any truth in the adage that we learn from mistakes, I should know a lot about the subject. Perhaps my greatest difficulty now is that I am too fussy about gas lines because I have seen so many things happen to them. But materials cannot be too good nor can too much care be taken with every detail of such an important part of the boat as the fue l line and all the valves and fittings associated with it.



Sketch 1. S. A. E. standard flared tube fitting

First, as regards the material of the fuel line. Dead-soft, seamless, annealed copper tubing is the accepted material. Hard-drawn tubing should never be used and even semi-hard copper will not give satisfaction. The reason for the use of the dead-soft tubing is to minimize the effect of vibration on the tube. Soft material withstands the shaking and bending caused by the motor, without breaking. Hard tubing will give way in no time if it is vibrated back and forth.

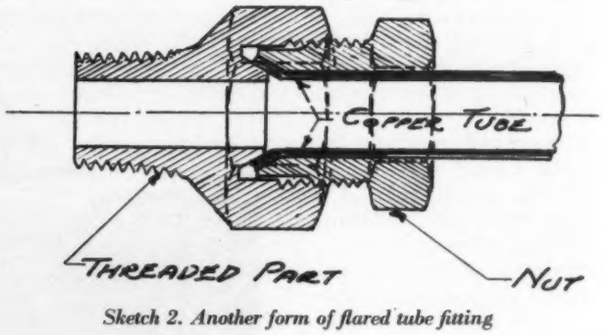
Nothing but the highest quality tubing should be used. I can give you more than one example of the over-zealous purchasing agent who saved half a cent a pound on the price of the tubing used in a stock boat model and ran up a service charge, after the boats were sold and the tubing began to break, of many times the cost of the entire tubing used in a year's output. Although it may not seem so at first thought, in boat work, and particularly in the motor installation and all that appertains thereto, the best is the cheapest in the end, not only for the owner but even for the builder if he stands behind his product as he should.

Other materials, such as Monel, Everdur and stainless steel, would, without question, make the finest sort of fuel lines, but their use has been restricted to a few experimental installations so far. They cost much more than soft copper. The pressure in the fuel line is only a couple of pounds at most, and little is gained through the use of the stronger and more expensive material. The properties of copper and the correct way to work it are known to every competent mechanic, which gives copper an additional advantage.

Tubing should be free from kinks and dents. Bent and kinked tubing can be straightened, but bending copper tubing makes it hard and brittle. At each sharp bend there is a certain amount of flattening which will reduce carrying capacity of the pipe. Any brittleness due to bending and straightening the tube can be remedied by annealing it.

Annealing copper is the process of making it soft and ductile. It is done by heating the metal to a glowing red and then plunging it into cold water or letting it cool quickly. In this respect, copper is exactly the opposite of steel which will become very hard and brittle when so treated. If an old piece of tubing is used as a fuel line, be sure that it is soft and that it has no flat spots — or better yet, sell it to the junk man and buy new tubing.

Copper tubing is connected to the tanks and to the valves and other fittings by means of special fittings. The tubes are so thin that pipe threads cannot be cut on the ends and screwed in place as would be done if brass pipe were used. There are three basic forms of



Sketch 2. Another form of flared tube fitting

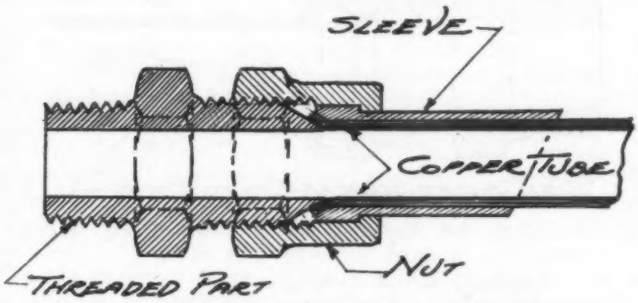
tube fittings, each of which has several variations. In all of them the idea is to make a tight connection to the tube and then to provide enough material on the other end of the fitting so that it can be screwed into a standard pipe thread.

One form of tube fitting which has been standardized by the Society of Automotive Engineers is known as the "Standard S. A. E. flared tube fitting." The sketch (Sketch 1) shows how it is made and how the tube is passed through one part of the fitting and then flared out by a flanging tool so that the copper is gripped between the two parts of the fitting and a tight metal-to-metal joint produced without the use of any packing material when the parts are set up. That part of the fitting marked "A" should fit snugly on the tube and give it support so that stress caused by a bend or vibration does not come on the flared portion of the connection. With this type of fitting, no solder and no brazing material is employed. It is entirely satisfactory for high grade boat work, *provided the workmanship and material of the fitting are satisfactory*. As far as design goes, it is a good fitting and is extensively used. These S. A. E. fittings can be obtained in a great variety of sizes and forms, each of which has a definite place in the scheme of piping.

In Sketch 2 is shown a variation of the S. A. E. fitting. The tubing has less flare and the arrangement of the parts is quite different from the standard S. A. E. fitting, but the whole general idea is the same. The nut which surrounds the tube supports it in the same way that the tubing is held by the other fitting. This also is a safe and satisfactory fitting to use in boat work and has an advantage in the ease and accuracy with which the tubing can be flared into the nut.

Still another variation is shown in Sketch 3. This employs a sleeve slipped on the tube after it has been pushed through the nut. The tube is then flared into the sleeve, making the tubing a tight fit in the sleeve, which offers additional support and prevents breakage of the tube by vibration.

The fittings shown in the sketches are all of the straight type, but they are made in elbows, tees, crosses, unions, and all forms which may be needed to connect up a fuel line in a simple and direct manner. Where each fitting is to be placed and what fitting is to be used should be determined before the gas lines are put in.



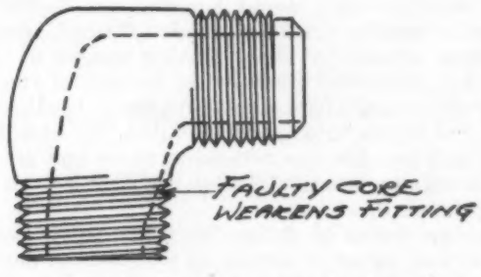
Sketch 3. Three piece flared tube fitting

As all these fittings are made on automatic machines and the cleanness of the finished product depends on the sharpness of the tools used in the machines, each fitting should be carefully inspected before it is used. Much time and trouble will be avoided if this is done, no matter who makes the fitting nor where it is obtained. In the standard S. A. E. type, the shoulder at the bottom of the taper in that part of the fitting which slips over the tube should be inspected most carefully to see that the tools used in making the fitting have left no burr which may be large and sharp enough to cut into the pipe at the start of the flare. One of the pipe line failures to which I have referred in the beginning of this article was due to a heavy burr at this point cutting into the tube and eventually severing it. Since then, I have asked that all such fittings be slightly reamed with a reamer having a bevel of 22½ degrees, halfway between the angle of the flare and the straight, so that if any burr is left by a dull cutting tool it will be removed before the fitting is used (Sketch 4).

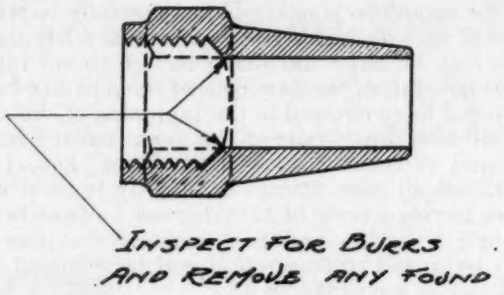
What is known as a compression fitting is sometimes seen on the fuel lines of some boats. Personally I would not permit such a fitting on a boat. As shown in the sketch (Sketch 5), this fitting depends upon squeezing a small brass ferrule, having a double conical form, so tightly around the tubing that it cannot leak. But when the ferrule is set up tightly enough to prevent leakage, it cuts into the tube, and as there is no support for the tube, it is almost certain to break off in a short time when subjected to heavy vibration such as it is sure to get when it is used in a boat. My advice is to avoid the use of this fitting.

One of the best fittings which can be purchased from stock is the "soldered" type of fitting (Sketch 6). This is the type of fitting which the Army Air Corps use in the army airplanes. The copper tube is soldered into a cone or "tail" with *silver* solder. Please note that ordinary lead-tin solder is not used as it does not possess the requisite strength. Another point to be noted regarding this fitting is that all holes are *drilled*. This insures that the hole in the fitting is central with the thread on the outside and that at no point does the thread come close to the hole, as may happen if the holes are formed by cores in a casting.

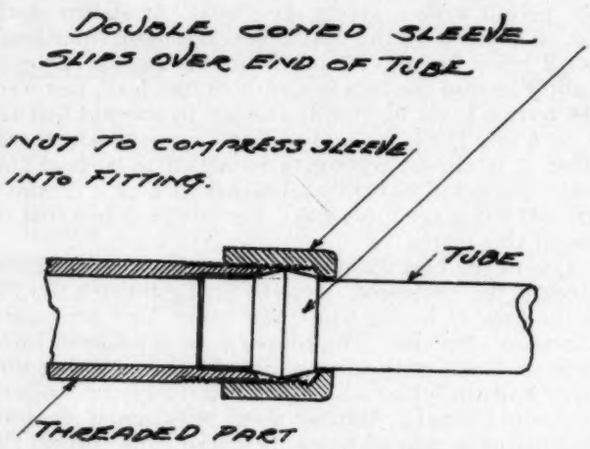
This is a most important thing to watch when installing fuel line fittings in a boat. The failure of a fitting due to the bottom of the thread coming practically through to the inside hole was the reason for the loss of a race by one of the best boats I ever put into the water (Sketch 7). After losing that race, the entire fuel system was rebuilt and every fitting in the fuel line was made of a forged steel piece, machined to size and drilled for the passage of the fuel. Does it cost much to do such a job? Indeed it does, but it costs far more to lose the race to win which the boat was built, because of trying to save a few hundred dollars on a most important detail. I do not go so far as to recommend that this be done in all cases, but I do say that every fitting should pass the most careful inspection and that the airplane standard fitting with drilled holes should be used in preference to any type with cored holes. And I will say that no fitting with cored holes would be used on the gasoline line of my own boat — should I ever be so fortunate as to own one. I'd save in the cost somewhere else if I had to and make the gas lines the best and safest I could.



Sketch 7. Elbow showing misplaced core



Sketch 4. Part "A" of flared tube fitting



Sketch 5. Compression type fitting

Fuel lines must be flexible. The boat is not a rigid structure. The tank and motor have considerable relative motion. Any lead of tubing between the tank and motor will have considerable movement. Any lead of tubing from the tank to a part of the hull structure must have a bend or a coil in order to let the tube come and go, and yet there should be no chance for vibration. Often the tube is formed into a complete turn or loop. When this is done the loop should be placed in a horizontal plane rather than in a vertical one. When the loop stands in a vertical plane, the vapor of an unusually volatile gasoline may cause a vapor lock and stop the flow of the fuel.

Another method of giving the necessary flexibility to the line is to use a flexible metal tube between the tank and the run of the gas line to the motor and then use another length of flexible tubing from this line to the carburetor. This is the best way I know of to insure a sound gas line in a racing boat. The tube can be firmly strapped to the hull — preferably one of the engine girders — and held so that it cannot shake or vibrate. All the flexibility is given by the short length of special tubing at each end.

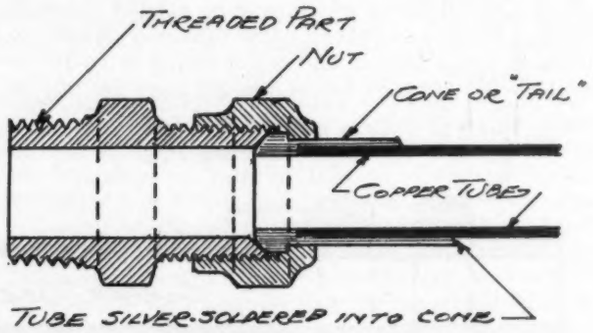
For safety's sake, avoid hanging valves and other fittings on nipples or other threaded fittings, because all the stress caused by the vibrating weight of the unsupported valve will come at the bottom of the thread and may — and often does — cause a break at that point. Far better to strap every valve, tee, or cross, to a block and provide the necessary come and go by the flexible tubing mentioned above or by a turn in the tube (Sketch 8).

Another means of giving flexibility to the line is to connect two pieces of tubing by a rubber connection as shown in the sketch (Sketch 9). At first sight this may seem to be a rather poor method but experience in airplanes and in racing boats has shown that it is one of the most reliable of all methods and is the standard of the Army Air Service. The little liner is placed between the two parts of the tube in order to keep the rubber hose from swelling under the action of the gasoline and crowding down into the tube, thus cutting off the flow through it. Special rubber tubing must be used or else it will have a short life since gasoline attacks ordinary rubber very quickly. I have used this method in racing boats with complete success and have also used the modification shown.

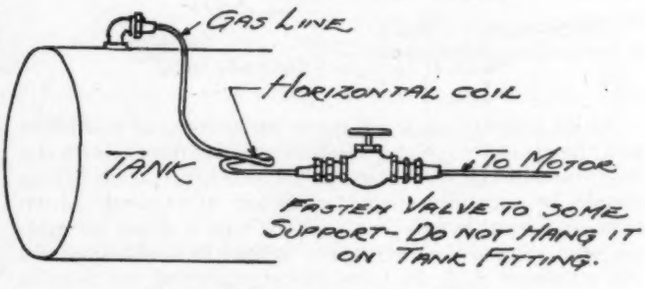
Gasoline valves are a problem. I have used many types and have found that a high-grade, globe valve is about as good for boat work as any. In racing boats there may be some objection to the weight of the standard globe valve and if that is the case, then a cock such as that specified for Army Airplane Service should be used. These cocks should be handled carefully for it takes only a little extra jamming and strong-arming with a big stillson wrench to squeeze the body of the valve out of the round and then it is no good at all. In fact, not a thing on the whole gas line should be mauled or forced, as it is all light work and should fit in place properly without stressing the material.

When laying out the leads of the gasoline lines and arranging for the valves and other fittings, many troubles are avoided if the whole is carefully planned from the start rather than waiting for the inspiration of the moment and hoping that everything will go in. At each tank there should be a shut-off valve or gas cock, whether one tank is used or a number of them. As the valves at the tanks are often inaccessible in case it is desired to shut off the flow to the motor quickly, another valve which controls the entire flow should be fitted at the carburetor where it can be reached instantly.

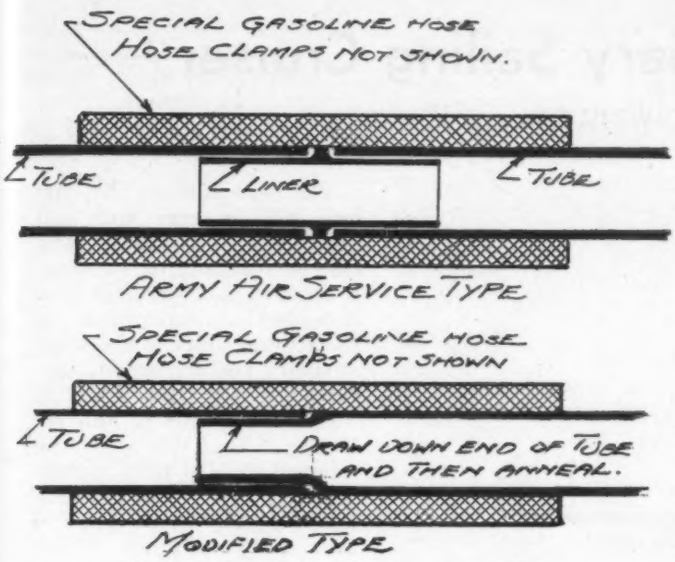
Gasoline lines should never be led way down in the bilge where they are inaccessible and where there is no indication as to whether they are leaking or not. I believe it is far better to have them up where they are ac-



Sketch 6. Air Corps standard soldering fitting



Sketch 8. Gas line arrangement at tank



Sketch 9. Flexible hose union for gasoline lines

cessible so that if there is any leak or seepage through any of the tubing, or at any fitting, it will become evident at once and can be remedied before an explosive mixture of the vapor is formed in the bilge. Since the tubing is soft and easily damaged, it should be protected to prevent its being dented or cut. Avoid leading the line where it is exposed to high temperatures, such as that alongside a hot exhaust pipe. Some of the high-test fuels vaporize so readily that if the pipe carrying them is heated only a little, the vapor formed will interfere with the action of the fuel pump and may stop the flow of fuel to the carburetor entirely. This is the reason for some of the cases where a motor will stop for no apparent reason at all and will not start again until the gas line has cooled down.

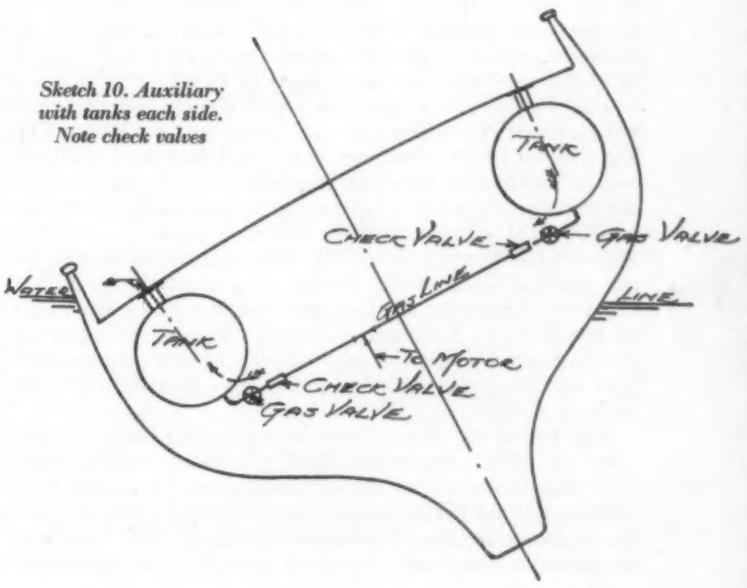
Gasoline lines should never be carried so that a pocket is formed. No matter how much care is taken in filling the tanks, nor how carefully the gasoline is strained, some water will collect in the tanks. As more and more water collects in the bottom of the tank some of it will pass into the gas line and may cause the motor to run irregularly, or may even stop it entirely. When the gas line drains naturally into the strainer, then this water can be removed at regular intervals and there will be no trouble. If the layout is such that it is not convenient to have the line drain into the strainer, then there should be a union placed at the lowest point in the line and the line drained by uncoupling the union. This requirement of draining the gas line is another reason why any coils or bends introduced into the line should never be in a vertical plane, but should always be placed horizontally.

Gasoline installations are much modified by the system used to get the gas from the tank to the motor. When the bottom of the tank is higher than the carburetor, the fuel will flow to the carburetor by gravity. This is the simplest method of supplying fuel to the motor and is entirely satisfactory when properly planned. Due to the fact that the head of the fuel on the gas is never great, the fuel line should have a liberal diameter and should be led to the carburetor as directly as is possible. One of the objections to the system is that a leak in the gas line or a leaky float needle valve in the carburetor will permit all the gas in the tank to flow into the bilge unless it is shut off by closing the valve at the tank or at the carburetor.

In many installations, the required gasoline capacity cannot be placed in tanks arranged to feed the carburetor by gravity, and on account of the modern tendency to place the carburetor high up on the motor—with down-draft manifolds the carburetor stands up above the motor like the steeple on a church — it is necessary to force or pump the fuel to the carburetor. Some years ago many boats used air pressure on the tanks to force the gas through the fuel lines. Although a positive and ample feed is assured when everything is in good order, it is not at all a convenient method of feeding the fuel nor is it as safe as the other systems. As the tanks are under pressure this intensifies the tendency to leak. In case of a leak, all the gas is forced into the bilge unless the pressure on the tank is released when the motor is stopped. Another objection to its use is that when the tank is filled, the pressure is released and, before the motor is started again, pressure must be pumped up by hand. The filling pipe must be sealed by an air-tight gasket and no vent can be used unless the vent is closed off by a valve when pressure is put on the tank. After the motor is running pressure is obtained from a small air pump on the motor, or from a pressure reducing valve which takes a small amount of the exhaust products, cools them, and uses them to build up the necessary pressure in the tank. This sounds like a complicated affair but, actually, it is one of the best and simplest ways of getting the desired pressure.

The pump system of feeding fuel from the tank to the motor is the one found in the majority of recent installations. Many builders of marine motors have followed the practice which obtains in the motor car and have equipped their motors with engine-driven, mechanical pumps to draw gasoline from the tank and force it at a low pressure into the carburetor. In practically all the different forms of this type of pump, the pressure is limited by a spring of the desired strength, so that no matter what happens, only as much fuel at the predetermined pressure is supplied to the carburetor as the motor uses. Vacuum tanks, although they were used by the hundred thousand on motor cars, were never of any use on a boat for they function best when the motor is throttled and in the boat the throttle is so wide open that a vacuum tank soon runs dry and the

(Continued on page 80)

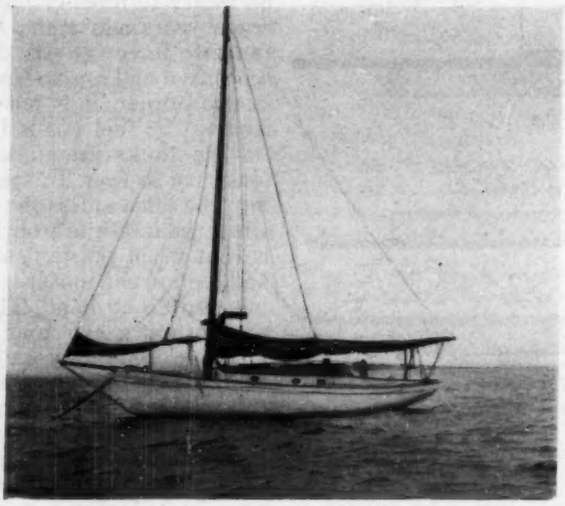


Sketch 10. Auxiliary with tanks each side. Note check valves

A Coastwise Auxiliary Sailing Cruiser

By RALPH E. WINSLOW

IN PREPARING this design of an auxiliary cruiser for YACHTING, I have endeavored to produce a boat that would be seaworthy, fast under either sail or power, with excellent cabin arrangements, comfortable accommodations for four persons, and sleeping quarters for one or two more in an emergency. In addition to these requirements, I wanted to provide ample cockpit and deck room and a shape that would sail at small angle of heel. All this I set out to encompass on a length of less than 30 feet over all, so as to keep down the cost to the minimum.



"Tamar III" is an auxiliary cruiser which has proved a fine sea boat

Now there are three different types that can be used for a coastwise cruiser. First is the light displacement hull with very narrow sail plan of small area, a type which is inexpensive to build but which has very little room for living quarters, the beam being only 7 feet in a length of 30 feet. This type, however, is easy to handle.

The second type is a somewhat beamier boat, say about 8½ foot beam on a 30-foot length, which gives more room, but not the maximum.

The third type, on a length of 30 feet, would have a beam of about ten feet. This type produces a hull that is very roomy, and while it is more expensive to build than the narrower boats, it gives much more boat for both the length and the cost. In general, I believe that the latter type is the most desirable for a small cruiser for four or more persons.

In 1931 I designed and had built three boats of the following dimensions: length over all 31′7″, waterline 24′11″, beam 10′3½″, draft 5′2″, displacement 17,650 lbs., outside ballast 5,000 lbs., with about 2,500 lbs. of inside ballast, sail area 648 square feet. Two were rigged as gaff sloops and one as a Marconi yawl.

The *Tamar III*, rigged as a gaff sloop, and powered with a model 4-30 Gray motor, I own myself. *Tamar III* has proved to be a fine sea boat, and fast under either sail or motor. To date she has beaten many boats of a similar size, type and displacement, and many narrower and of lighter displacement. She has made 75 nautical miles in ten hours and in 1931 won the championship of the Boston Yacht Club Cruise in the auxiliary sailing class. In hull shape she is a modification and refinement of the famous Friendship sloops. The accompanying photograph will give a general idea of her appearance. Her success has prompted me to use this type for the present design.

The following dimensions were decided upon: length over all 29′9″, waterline 23′3½″, beam 10′2″, draft 5′3″, displacement 16,740 lbs., sail area 578 square feet, outside ballast 6,100 lbs. of iron and about 1,000 to 1,500 lbs. of inside ballast. These dimensions provide excellent accommodations and plenty of cockpit and deck room.

The lines indicate that the hull will be very stiff and able, good to windward, and fast in reaching or running. A discussion of the lines here is somewhat superfluous as the general shape of the small auxiliary keel cruiser was discussed in the June issue of YACHTING, pages 75 and 76. I suggest that this article be referred to. The only feature of the present design which differs greatly is the shape of the underwater profile, which I have made straight on the bottom to simplify hauling out.

I have shown three different rigs. First a gaff sloop, this rig being efficient and easy to handle. An extra heavy mast has been used so that backstays can be eliminated. All sheets are on travelers so the work of handling sails is slight. I have not given her a Marconi rig because I believe that such a rig gives too tall a mast for the location on a sloop (quite far forward) and would need backstays, which are considerable of a nuisance. The sloop rig will show up to good advantage on all points of sailing and is especially good running, as it gives a large area in the mainsail, and jibs or headsails are of little use before the wind.

The sloop rig is at a disadvantage when it comes on to blow, as the boat is more or less out of control while reefing or changing jibs; however, the motor may be run during this process. A boat from this design will be so stiff that reefing will seldom be necessary in the yachting season. I found on *Tamar III* that she would handle perfectly under mainsail alone, and even sail within 6½ to 7 points of the wind under the jib alone. The sloop rig does not lie well at anchor with the mainsail set, but for simplicity and cheapness it has much to recommend it, especially if the boat is to be used for the normal short coastal cruises, week-ends and day sails, that are all most of us have time for.

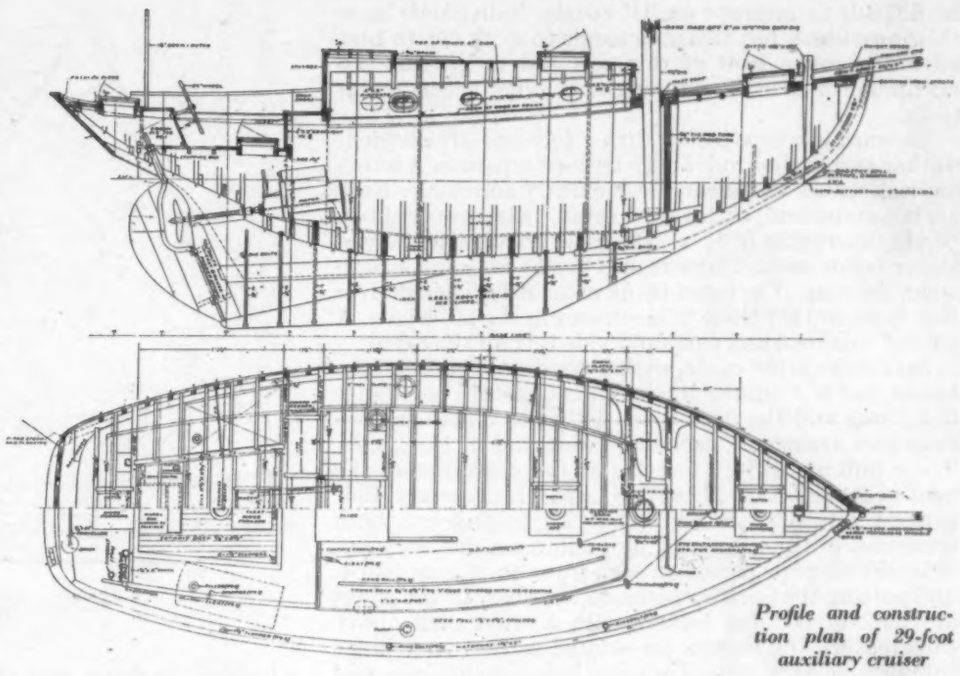
The second rig is that of a Marconi cutter. This is more of a seagoing rig but has the disadvantage of a lot of sails to handle, and backstays to tend, and the mast has to be stepped through the cabin trunk, which is not quite so strong as stepping it through the main deck and interferes somewhat with the cabin arrangement. It would be about as fast as the sloop rig to windward or reaching, but quite a bit slower running unless a large spinnaker is used. The cutter rig will lie quietly at anchor with the mainsail set. Also, various combinations of sails can be used and the necessity of reefing is less than with the sloop rig. Lowering the forestaysail will reduce the sail area about 19 percent, which is easier than reefing and is equal to one reef in the sloop rig. The mast, being much farther aft than on the sloop, produces a better sea boat. A large spinnaker, or balloon, or Genoa jib, can be used to advantage with this rig. The boat can be sailed as a knockabout under forestay-

sail and double-reefed mainsail in heavy weather, and she will heave to under a reefed or storm forestaysail and close-reefed mainsail or trysail.

The third rig is that of a Marconi yawl. This rig is the easiest to handle but is not as efficient to windward as the sloop or cutter. It has advantages over the other two when sailing short-handed. Permanent backstays and mizzen springstay eliminate the necessity of handling running backstays, and there is no more work in handling the boat after the sails are hoisted than with the sloop rig.

She can be sailed under jib and mizzen, with or without whole or reefed mainsail. Reefing is seldom necessary, and she lies well at an anchor with the mizzen sheeted in flat and mainsail set with the sheet slacked. Lots of light sails can be set, as on the cutter, and also a mizzen staysail can be used. The cockpit is clear of obstructions. With this rig the boat will heave to well under jib and mizzen, or with reefs in them, and also with a close-reefed mainsail and reefed mizzen, or a small mizzen trysail.

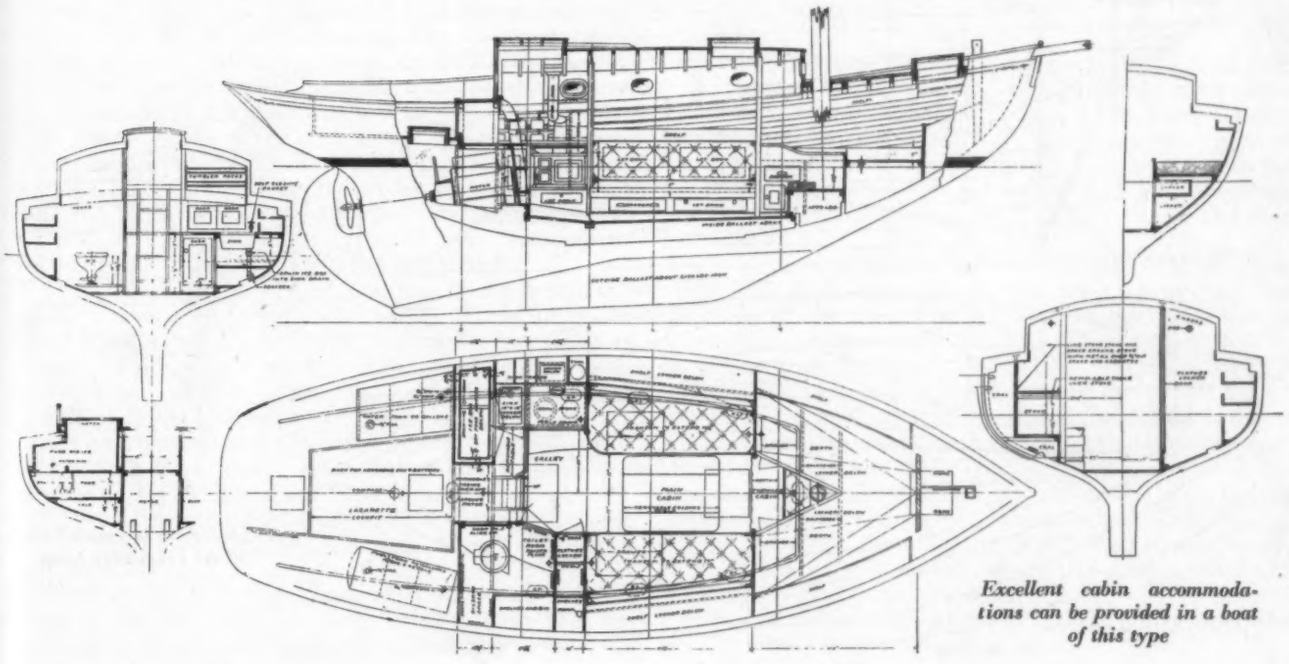
Probably some will wonder why I have not recommended a ketch rig. On a boat as small as this I think that the mizzen clutters up the cockpit too much. Also, it is very difficult to get sufficient sail area without making exceedingly high spars and a quite long bowsprit and mizzen boom. The ketch rig is more adaptable to a narrow, less powerful hull, and is not so efficient, particularly to windward. I would recommend it on a larger boat, but not on a boat less than 35 feet long.



Profile and construction plan of 29-foot auxiliary cruiser

The construction plan shows this part of the boat plainly, and gives dimensions, scantlings, etc. The cockpit, 5′ 3½″ long, with a bridge deck 17½″ long, has a usable length of 6′ 8″, and an average width between the seats of 3′ 5″. The deck is used for seats. The side deck varies from 16″ to 20″, thus providing comfortable walking space. The forward deck is 8′ 6″ long, so there is plenty of space for handling sails and anchor. The after deck, 3′ 6″ long, is wide enough to give plenty of room for handling the after end of the mainsail, or to take the mizzenmast on the yawl rig. The deck layout has been kept simple and as free from obstructions to stumble over as possible and still retain useful hatches, travelers, etc.

The cabin plan shown is a development from several previous boats. From actual experience it seems to me to



Excellent cabin accommodations can be provided in a boat of this type

be difficult to improve on. Of course, individuals have their own ideas, but this plan seems to work out to best advantage on a boat of this size and to provide the maximum of space in sleeping and living accommodations.

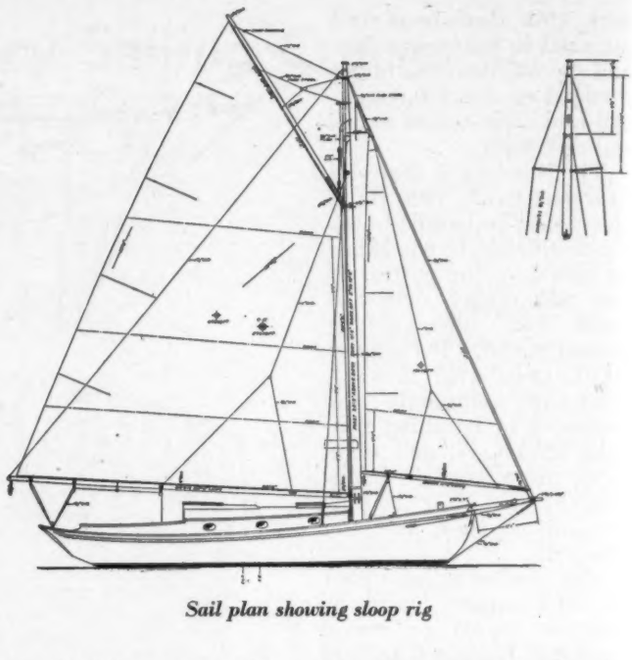
Forward is a rope locker with a fore-and-aft division, so that two anchor rodes may be kept separate. A hatch on deck makes the anchor gear quickly accessible. Next aft is a stateroom, or forward cabin, with two built-in berths, averaging 6′ 4″ x 27″, with drawer and storage locker below each. There is also a seat for convenience when dressing. The cabin trunk extends far enough over this room so that there is headroom in the after part. A partial bulkhead and curtain divide it from the cabin.

Amidships is the cabin, with 6′ headroom between the beams and 6′ 3″ under the hatch and slide. The cabin is 6′ 1″ long and the floor space 34″ wide. There are two extension transoms, each 28″ wide and 6′ 1½″ long. These pull out 16½″, meeting at the centerline of the boat to make berths about 3′ 6″ wide. If necessary, four persons can sleep in the cabin by pulling out both transoms, or three persons, by pulling out one transom, or by sleeping one person on each transom, not extended, and putting the back cushions on the floor. In the wings are built-in bedding lockers with a wide shelf above each locker. The lockers are slanted so that they make comfortable back rests. They also hold the cushions used for the extension part of the transom. Two drawers and two lockers complete the cabin detail.

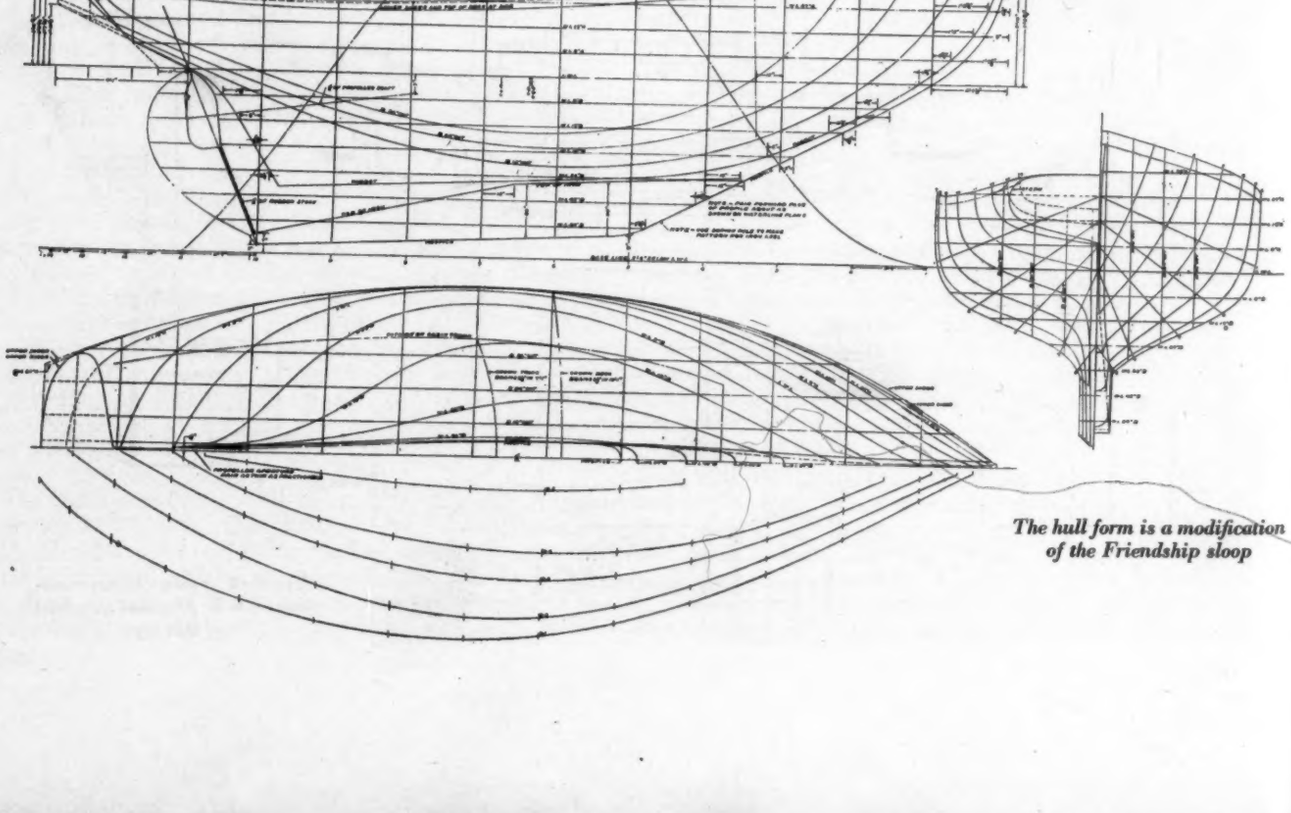
The dining table is set on removable pipe stanchions and can be stowed in a rack under the forward deck when not in use. It will accommodate six persons.

Aft, on the port side, is a galley with space for a No. 212 (top size 17″ x 24½″) Shipmate coal stove, sink, with a storage locker below, and a dresser table. The stove has a removable dresser top over it which can be utilized when there is no fire, making a total table space of about 5¼ square feet. Dish shelves are back of the sink and stove, and a coal locker, filling from the deck, is back of the stove, with gravity flow. Running water is provided for the sink. The icebox, which drains overboard, is athwartships and has an outside filling hatch in the bridge deck. There is thus little danger of the contents falling out when the doors are opened.

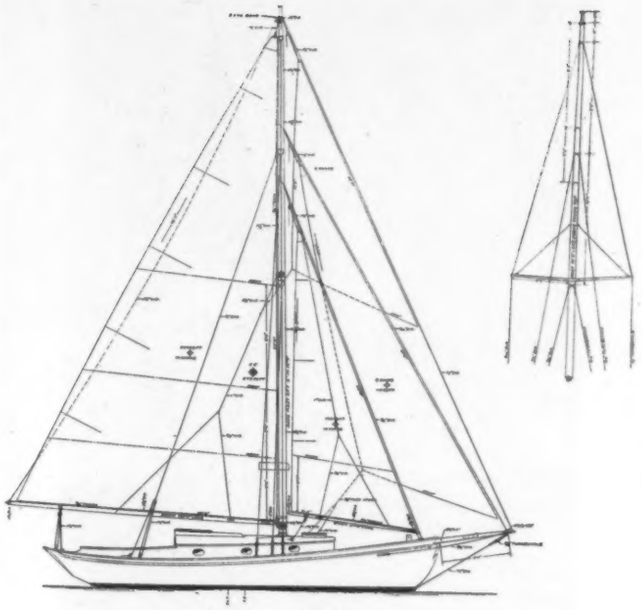
On the starboard side is a toilet room, 3′ 5″ long by 27″ wide, with headroom of five feet. A small folding wash bowl (not shown) can be fastened to the forward bulkhead, if desired. Shelves are provided for tools, lanterns and miscellaneous gear and toilet articles. Between the toilet room and cabin is a fair sized clothes closet with shelves and hanging space. Space is provided for oilskins in the wing on the after starboard side.



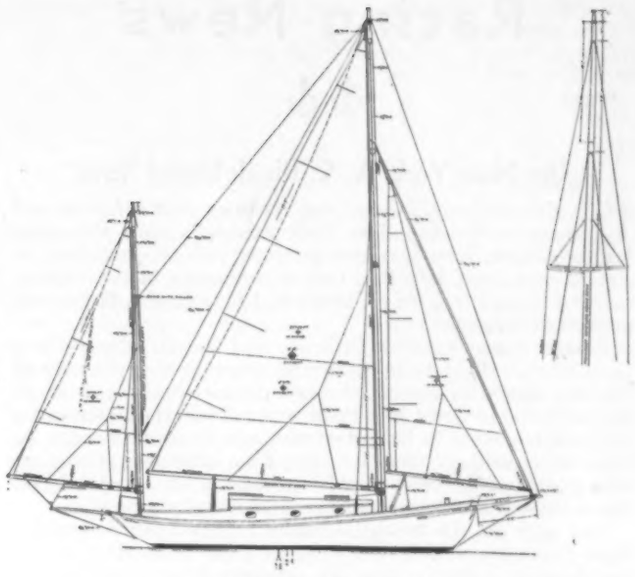
Sail plan showing sloop rig



The hull form is a modification of the Friendship sloop



Rigged as a Marconi cutter



With Marconi yawl rig

The motor is beneath the bridge deck and the forward end of the cockpit. It is completely concealed, but very accessible. A bulkhead is built on the back of the cabin steps, a removable shelf is over the top of the motor and there is a slide-up door in the toilet room bulkhead. It takes about ten seconds only to make the motor "get-at-able."

I have shown a 4-cylinder Model 4-35 Gray motor. This will give a speed of about seven and a half nautical miles in moderate conditions and will handle the boat under power in any but the most severe conditions. It will swing an 18″ by 10″ pitch two-bladed propeller without being overloaded.

The cockpit has a hatch for access to the stuffing box, reverse gear, storage battery, motor control rods, fuel and water piping, and the general storage space below the cockpit. A 40-gallon cylindrical fuel tank is on the starboard side of the cockpit and a 40-gallon "shaped" water tank is on the port side. The fuel capacity is sufficient for a cruising radius of about 200 miles under motor, if conditions are favorable and care is taken not to operate with a wide-open throttle.

A hatch in the after deck gives access to the after peak and provides ventilation. If the cover is hinged forward and up and provided with two strong hooks, it will make an excellent back rest for the helmsman. Of course, all motor controls, horn push button, etc., are arranged to be led back to the wheel box.

I have received prices for building boats from these plans, varying from $2800 to $3800. These prices include the hull complete, ballast, hardware, blocks, spars, rigging, deck joiner work, cabin interior and joiner work, tanks, piping, plumbing, material and labor of installing motor, anchor and cables, stove, electric lights and wiring, and the government required equipment. This for a sloop rig. A cutter rig is about $50 more, and a yawl rig about $100 more.

Sails and covers varied from $125 up to $300, depending on cloth used, rig and sailmaker. Almost any motor can be used that is no larger than the Gray Model 4-35. They can be bought from about $250 up to $400. Electric storage batteries range from $15 to $35, depending on make and capacity. Upholstery from $125 to $200; compass from $20 to $50; tender from $50 to $200, depending on type.

These estimates have all been based on good material and workmanship and were obtained from New England boat builders in different localities. It would seem that it would be possible to get a boat built from these plans for somewhere between $3300 and $5100, depending largely on the quality of material and equipment desired, and the builder selected.

A well-built boat from this design would be sufficiently seaworthy for almost any sort of a cruise that might be contemplated, either coastal or offshore.

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Insurance Rates Not Too High

Editor, YACHTING:

IN THE June issue of your magazine I read with interest the article by "Cap Stan," in his section, "Under the Lee of the Longboat," in regard to marine insurance, and in the July issue he again harps on the same subject. I could forgive the first article on the ground of ignorance, but the second goes a little too far, so may I be permitted to reply and set the young man straight?

In the first place he overlooks the fact that the basic principle of all insurance is that the "many bear the burdens of the few." Furthermore, he says that the experienced skipper pays the same rate as the tyro — which is quite incorrect, as the experienced owner now gets a reduction of 20% at the end of the year if he has made no claim, if his boat is insured for $5,000 or more.

Then, again, does he realize that a large proportion of the losses occur while the boat is in the shipyard in the hands of workmen, and that no matter how capable the owner may be, the yacht marine policy covers many things for which the company is obligated to pay claims which cannot be foreseen, no matter how careful the owner may be, or how experienced?

Does he realize that the yacht marine policy, with the

(*Continued on page 74*)

Racing News

The New York A. C. Block Island Race

LONG Island Sound's oldest long distance contest for sail and power craft — the New York Athletic Club's Execution Light-to-Block Island race — attracted an off-year fleet of sixteen yachts on July 9th, twelve competing in the twenty-seventh annual test for sailboats and four in the 23-year-old motorboat division.

Ernest Ratsey's cutter *Golliwog*, and the Granberry-Cross partnership's sloop *Anita* made a private race of it virtually all the way down the Sound, through the race and across Block Island Sound to Great Salt Pond, and finished the 100-mile run before a moderate to light westerly only 41 seconds apart. As both were sailing under the same time allowance, *Golliwog's* slim margin at the finish gave her first place for the second year in succession. *Anita* repeated her 1931 runner-up position.

Not only did the two little single-stickers finish well within their time allowances from the larger yachts, but they beat all but Seward de Hart's venerable schooner *Rissa*, boat for boat. *Rissa*, playing the north shore of Long Island Sound, carried all her kites and went like a scared rabbit. She had an elapsed time of 15 hours, 50 minutes and 5 seconds, a commendably fast passage, but could not save her time on *Golliwog* and *Anita*. She took third place on corrected time.

Undoubtedly the dusting many of the cruising type racers took in the Stamford Yacht Club's Vineyard Lightship race the week previous accounted for the slim turnout. In contrast to Stamford's boisterous weather, the N. Y. A. C. race was favored with nothing much heavier than a 15-knot breeze, and the wind was nearly always dead aft. Only one of the twelve sailboats failed to finish.

One of the three power boat starters, *Deuces Wild*, broke down off Oldfield Point and was towed into Greenport by her only Class B competitor, *White Shadow*, which resumed the race and finished late Sunday morning. Dr. George E. Rice's Elco 45-footer, *Wah-Ne-Ta*, from Bayport, L. I., won the Block Island Trophy for the best corrected time and Thomas F. Egan's *Revelation*, a converted 50-foot Navy motor sailer, won the American Power Boat Association cup for finishing closest to her past performance schedule. *White Shadow*, owned by

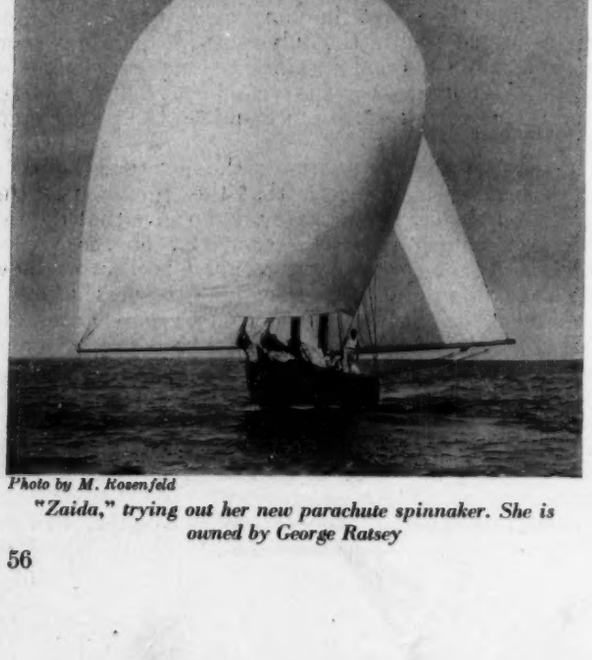

Photo by M. Rosenfeld

"Zaida," trying out her new parachute spinnaker. She is owned by George Ratsey

Ernest Ratsey's "Golliwog," under a remarkable spread of canvas, sailed to first place in the New York Athletic Club Block Island race

William C. Alley, of New Rochelle, took the prize for fast cruisers.

The sailboat summary:

Course, 100 nautical miles, Start 12 noon

Yacht, owner and club	*Elapsed Time*	*Allowance H M S*	*Corrected Time*
Golliwog, Ernest Ratsey, Larchmont	16:24:35	4:10:00	12:14:35
Anita, G. P. Granberry & L. G. Cross, New Rochelle	16:25:16	4:10:00	12:15:16
Rissa, S. de Hart, City Island	15:50:05	1:50:00	14:00:05
Surprise, E. H. Cooper, Dauntless	16:48:15	2:40:00	14:08:15
Manatauqua, P. E. Truesdale, New Bedford	16:29:35	2:00:00	14:29:35
Playmate, R. D. Teller, Bayside	17:57:40	2:55:00	15:02:40
Ranger, H. M. Baker, Knickerbocker	20:42:15	4:50:00	15:52:15
Sally IX, G. F. Hubbard, Stamford	18:50:40	2:50:00	16:00:40
Volante, A. L. Loomis, New York	18:00:15	1:40:00	16:20:15
Two Brothers, R. Chetwode & H. Scheftel, New York	21:17:33	4:20:00	16:57:33
Maia, C. D. Waldron, Port Washington	22:41:08	4:55:00	17:46:08

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Eastern Yacht Club Sails Annual Cruise

THE two Cup yachts *Vanitie* and *Weetamoe*, two of the four twelve-metres in commission, *Mouette* and *Iris*, half a dozen Marblehead 25-raters and eight-metres, and a fair-sized attending squadron of auxiliaries and power craft, enabled the Eastern Yacht Club to maintain its traditional cruise early in July. Instead of running down the Maine Coast as did the fleet under Commodore Heard, in the club's initial jaunt 62 years before, the yachts made Kittery their farthest point east. Five sailing events were run off during the week under light to fresh winds with only a day's delay on account of fog. *Weetamoe* won four races, *Mouette* took three, *Iris* two, *Robin* a trio, and *Lively Lady* and *Falcon* one each in the 25-raters, while Commodore Aldrich's *Armida*, sailed by his son Nelson, made a clean sweep of the Eight-Metre Class.

In light airs, *Vanitie*, with her new tall rig, seemed able to save her time of seven seconds a mile on *Weetamoe*, but as soon as it breezed up to something over six knots, the Prince boat

"Weetamoe" and "Vanitie" in the opening race of the New York Yacht Club, off Glen Cove, in June. "Vanitie" won the series

drew rapidly away, and the harder it blew the more she gained. This was shown particularly in the final run from Rockport to Marblehead, sailed in a 15-knot nor'wester. After the two boats had turned Cape Ann whistler on practically even terms, *Weetamoe* gained nearly twelve minutes in the 23-mile run up the bay under flattened sheets to Boston Lightship. Skipper Harold S. Vanderbilt, who sailed *Weetamoe* most of the week, fetched the lightship, but Secretary Adams, on *Vanitie*, had to make a short hitch, due in part to a shift in the breeze.

In a 20-mile slide down a moderate breeze three days before, in the run to Kittery, *Vanitie*, with the aid of an enormous double luff spinnaker, outfooted *Weetamoe* by about a minute, not enough to save her time in the race.

In the Puritan Cup race, sailed for by all club yachts in one class, on their rating, as in the King's Cup Race, *Weetamoe* won the silver tankard given by Ogden Goelet in 1885.

W. U. Swan

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Lake Michigan Racing News

DEPRESSED or otherwise, Lake Michigan yachtsmen have entered into the early events of the 1932 season with a spirit which shows unmistakably that the prevailing melancholy of the times does not extend over this fresh water sea. A full roster of yachts has sailed in all the regular weekly club races, while the initial major events of the season have compared favorably with other years, both in the number of participants and in the enthusiasm displayed.

The Columbia Yacht Club's forty-first annual race and cruise to Michigan City, for both sail and power boats, saw more than fifty yachts cross the starting line off Grant Park, Chicago's front yard. This 32-nautical mile stretch across the lower end of the lake was the inaugural fresh water race for both Sterling Morton's handsome two-sticker, *Freedom*, and the Robinson brothers' Marblehead "Q" champion, *Hope*. *Freedom*, a Chicago-built schooner, returned to Lake Michigan this spring after cruising more than 12,000 miles along the East Coast and among the West Indies. *Hope* was shipped here from Marblehead early this spring.

The Michigan City race began with a fresh southwesterly which was much to the liking of the heavier boats and permitted a fast spinnaker run. The wind vanished halfway across, however, and resulted in a thorough mixing of the classes with the light boats ghosting past the cruisers, which had obtained substantial leads when the wind was weighty. The first boat over the finish line was the "R" rater, *Jonnie*, owned by Bill Gavier and Burt Massee, followed by Gus Nyland's fast Seawanhaka sloop, *Springtime*. R. P. Benedict's black schooner, *Bagheera*, one of the fastest boats on the lake in any weather, proved nearly as slippery as the lighter craft and glided past the race committee on the Michigan City pier far ahead of any other contestant in Class A of the cruising division.

Although entered in the Michigan City race, where she finished second in her class, *Hope*, the sloop which John Alden designed for his own use, had her first real test against the local "Q's" in the three-race Virginia Trophy series held off Belmont harbor, June 24th, 25th and 26th. *Hope* captured the series, but not in the easy style in which it was predicted. The contest was close, with a tie of 6 points between *Hope*, *Siren* and *Princess* after the second race. The final race was won by *Hope* with a margin of seconds over *Siren*.

Another early event on the local yachting calendar was the Lake Michigan Yachting Association's annual race from Chicago to Milwaukee, and the regatta for all classes at the Wisconsin port over the week-end of July 1st to 4th. A fleet of 25 boats sailed in the long event. Lynn Williams' *Elizabeth* won the cruise division with *Katinka* second, and *Gossoon II* took the prize in the racing class, *Siren* being second.

A new event on the Chicago Yacht club racing schedule, an overnight race across the lake to St. Joe, seventy miles, for the cruising sail yachts, was won by the schooner *Privateer*, owned by Commodore Clark Wright and A. B. Scott. This race was arranged especially to provide further squadron runs for the growing fleet of able cruisers. *Bagheera* took second place, with Dr. Cobb's *Nira* third. Col. A. E. Pierce's schooner, *Quicksilver*, was the first boat to finish.

In the "R" Class, only five races of the first series have been sailed. Dauchy's *Varya* and Sheridan's *Ariel* are tied for first place. *Gossoon II* was leading until the last race when she did not finish, due to pulling a forestay. It is regretted by Chicago yachtsmen that *Alert IV* has not been commissioned and that they will be unable to see her and *Gossoon*, owned by Faurot and Vail, hook up this year.

The activities of the Lake Michigan Star fleet have attracted much interest this season, due partly to the fact that they are the only type of local sail craft which will compete in the Olympics. The Lake Michigan eliminations for the Great Lakes Olympic tryouts at Peoria were held off Wilmette Harbor and won by *Bee*, sailed by George Dalseg of the Chicago Yacht club. *Bee* lost to *Majella II* of Peoria, however, in the eliminations sailed on the Illinois River at Peoria, June 17th to 19th.

W. W. Oates

Photo by W. B. Jackson

The Class Q "Hope," formerly owned in Marblehead, and now having her first season of racing on Lake Michigan

Photo by J. G. Robinson

At the finish of the Mills Trophy race, Toledo. "Bimesa" leading "Tomboy"

Corinthians Defend Title to San Francisco Trophy

ONE of the sweetest races in the history of San Francisco Bay yachting went down in the log under date of June 15th when the Corinthian Yacht Club took one more hitch around the Perpetual Challenge Cup as the defending sloop *Loon* led the challenging *Lark* of the St. Francis Yacht Club across the finish line by a margin of 2 minutes, 29 seconds. The handicap brought this lead down to a net 54 seconds.

A smart 16-knot breeze fanned through the Golden Gate during the entire race, sending the two Bird boats over the 13-nautical-mile channel course in two hours, 40 minutes. Myron Spaulding skippered the *Loon*, Bob White the *Lark*, each boat being crewed with three men.

At the starting gun, the challenger stepped out and annexed a 16-second lead on the short reach to Presidio Shoal buoy; at Goat Island she stretched her advantage to 42 seconds, and at the Southampton marker she was 25 seconds out in front. In the lee of Alcatrez Island, where any number of bay races have been won and lost, the defending *Loon* worked into a slight lead and the windward berth. In the long beat back *Loon* increased her lead all the way to the finish.

This year's event was the first in which both boats were from the Bird Class, and marked the twentieth win for the Corinthians since 1895. The Corinthians have likewise held continuous possession of the cup since 1922 against all comers from both northern and southern California waters.

TOM WHITE

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Harvard Sailors Win College Title

WILLIAM B. CUDAHY, who at twenty-one can look back at a yachting career studded with two Sears Cup triumphs, an interscholastic championship and a runner-up prize in his first quest for the Scandinavian Gold Cup, teamed with Frank L. Young 2d, product of the Duxbury Yacht Club's stern school for young sailors, to make sailing history in the fifth annual regatta of the Intercollegiate Yacht Racing Association at the American Yacht Club, Rye, N. Y., June 15th–16th.

Cudahy rolled up 51½ points out of a possible 60 in the five-race series and swept Harvard to victory over Princeton, the 1930 and 1931 champion, Yale, Williams, Dartmouth, and Cornell for the first Cantabridgian triumph since Briggs Cunningham initiated the competition in 1928. No skipper in this increasingly keen test of small boat sailing ever made a better showing than the Crimson sophomore.

He was a poor seventh in the first race, a fluky drifting match in which he sailed the less favorable course to let his team-mate cover a Princeton rival on the other, but thereafter Cudahy was almost perfect. He was second to Larry Reybine, of Yale, in the next contest, and third behind Pete Cumming, of Princeton, in the closing test of the first day's sailing. As a consequence of the Cudahy and Young endeavors Harvard went into the last two races leading Princeton by seven points, Williams by nine, and Yale by thirteen.

Favored by a light to moderate and fairly steady easterly on the second day, Cudahy was at his best. He led the fleet home in both of the concluding tests, Young stayed reasonably well up in the pack and Harvard won its first leg on the William B. McMillan perpetual challenge trophy with 93¾ points. Princeton, with the same two skippers who had given the Tigers victories in the two preceding championships, was second with 81¼, and Yale, losing heavily in points through the withdrawal of one of its boats after a foul at the start of the first race, did well to finish third with 80¼. Williams, thanks to the consistently good sailing of Johnny Fox, of the *Dorade's* crew, had 71 points, Dartmouth, 41, and Cornell, with one boat that couldn't get out of last place in any race, trailed with 22.

"Loon," of the Bird Class, successful defender of the Perpetual Challenge Cup

The crews were housed and entertained by the American Yacht Club, the latter's regatta committee handled the courses faultlessly and C. Sherman Hoyt, godfather of the I. Y. R. A., was around to see the races and give the collegians a lot of sound advice on the policy of their organization. Billy Crow, of Princeton, was reëlected chairman of the association.

The competing colleges and the skippers who sailed the Atlantic Coast knockabouts borrowed for the series were:

Harvard — William B. Cudahy and Frank L. Young 2d.
Princeton — William L. Crow and Peter Cumming.
Yale — Lawrence F. Reybine and John Muhlfeld.
Williams — John D. Fox and Frank J. Mather.
Dartmouth — Gus H. Zimmerman, James B. Moore and James F. King.
Cornell — Emory Thompson and Robert McCollom.

Heavy Weather Scatters Stamford-Vineyard Ocean Race Fleet

ALF LOOMIS, noted apostle of the What-You-Start-You-Ought-to-Finish creed in long distance racing for cruising yachts, ought to be writing this story. Think of all the fun he could have reporting the fact that only four of the twenty-two starters in the Stamford Yacht Club's 232-mile race from Shippan Point to the Vineyard Sound Lightship and return completed the course. Consider also the joy with which he would sink verbal darts into the brine-soaked bodies of skippers who abandoned the race because gear carried away, rigging parted, canvas blew into shreds and seams opened up in the steep seas and whistling westerly that approached gale force after most of the fleet reached the lightship.

Perhaps, however, it is better that this piece be written by one who remained safely ashore during the week-end of July 1st–4th and has only sympathy for the yachtsmen who weathered the black thunder squall that accompanied the start of the race at nine o'clock the night of July 1st, drifted through calms and fog early the next morning, zoomed down to the lightship Saturday afternoon and evening on the wings of a freshening westerly and then quit late that night or the following morning because they could not make headway in the tumbling, spume-topped seas kicked up by a head wind from the west that piped up as high as 35 miles and more before sunset, Sunday, brought abatement.

Stays parted, halliards and sheets snapped, shrouds loosened up and gave way, sails split, solid water came aboard some of the smaller packets, spoiling fresh water and food; crews grew weary from the constant battering and tossing; quiet havens to leeward proved an almost irresistible lure. In a word, the race provided a searching test of seamanship and physical stamina, a hammering that brought out every weakness in rigging and hull. The survivors deserve the commendation that the foregoing implies. Those who were forced out, or quit so that they might race another day, need not stand abashed.

Three of the four finishers crossed the line off the Cows within a little more than two minutes in the middle of Monday morning. The fourth, a Class B ketch driven hard by a crew of Harvard stalwarts, got in early in the afternoon. The rest of the fleet had taken shelter in ports from New London to New Bedford.

The winner of this latest addition to long distance races for cruising boats turned up in *Wild Goose*, the Fisher's Island sloop so ably handled by Charles B. Rockwell, Jr., of the Bristol, R. I., Yacht Club. She finished astern of *Lark*, a double headrig sloop owned by David C. Forbes, of Naushon, and *Volante*, a 52-foot gaff-rigged schooner owned by Alfred L. Loomis, of the New York Yacht Club (not the Alf Loomis before mentioned), but beat them both on corrected time. As a result she won the Vineyard Trophy for the best corrected time, and took the Class A prize to add to a collection already large.

Lark took the Commodore Harry W. Sturgis Trophy for the first yacht to finish by beating *Volante* after passing under her counter on their last tack 200 yards from the Cows. Class B prize went to the 41-foot ketch *Nancy Lee*, owned by Donald Scott, Jr., of the Seawanhaka Corinthian Yacht Club.

Handicaps were based on a system that combined salient features of the Bermuda and ocean race measurement rules and restrictions were placed on the number of light sails carried.

The summary:

Yacht, owner and club	*Elapsed Time*	*Allowance*	*Corrected Time*
**Wild Goose*, C. B. Rockwell, Jr., Bristol	61:18:44	5:24:48	55:53:56
Lark, D. C. Forbes, Quissett-Beverly	61:16:13	5:17:32	55:58:41
***Nancy Lee*, D. Scott, Jr., Seawanhaka	65:02:44	8:36:23	56:26:21
Volante, A. L. Loomis, New York	61:17:06	4:32:29	56:44:37

*Class A (42 to 60 feet overall) winner.
**Class B (30 to 42 feet overall) winner.

EVERETT B. MORRIS

Competing in the 232-mile ocean race from Stamford to Vineyard Sound, C. B. Rockwell's "Wild Goose" added another victory to an impressive list

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"Wah-ne-ta III," an Elco 45-footer owned by Dr. George E. Rice, won the trophy for the best corrected time for power cruisers in the New York Athletic Club Block Island race

The Interscholastic Championships

FIFTY-FOUR youthful tars, representing eighteen preparatory schools in Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Pennsylvania and Florida, struggled about upper Buzzard's Bay the last week in June in the fourth Interscholastic Yachting Championship, with the crew from St. Mark's School, of Southboro, Mass., carrying off the beautiful silver knockabout, presented to the association as a perpetual trophy by President Clifford D. Mallory, of the North American Yacht Racing Union, who initiated the championship, and whose son was one of the participants.

The St. Mark's boys had a slight edge on the other crews, for Capt. E. Dwight Fullerton, Jr., of Dedham, Mass., and Robert A. Knowlton, of Weston, Mass., are both members of the Beverly Yacht Club, off whose station nine races were sailed in the club's Herreshoff 15-foot centerboard gaff-rigged knockabouts, loaned for the event.

The number of aspirants was the largest ever brought together, and it was necessary, therefore, to divide the field into two sections, from which Tabor, Adirondack-Florida, Kent, in one division, and St. Marks, Roxbury, and Hotchkiss in the other, emerged as qualifiers for the finals.

St. Marks won the first of the concluding races, a four-mile leeward and windward affair, and took the third, a six-mile triangular race, both by showing clever work up the breeze. In the second race, Tabor picked up a new wind under the shore and romped around the windward mark well in the lead.

All hands learned a number of valuable lessons, one of the most important being the necessity of reading the racing instructions, for eight out of nine crews were disqualified in the first preliminary for sailing the wrong course and two crews were thrown out for trying to force a passage at the start.

The point scores were as follows:

PRELIMINARY ROUND.

Section A: Tabor 23¼; Kent 15; Adirondack-Florida 14; Loomis 13¼; Storm King 12; Choate 6; Morristown 5; Pomfret 5.

Section B. St. Marks 20¼; Roxbury 18; Hotchkiss 18; Westminster 15; St. Paul 15; St. Georges 14; Lawrenceville 13¼; Hackley 12¼; Hill 9.

FINALS.

St. Marks 15½; Kent 14; Tabor 12½; Adirondack-Florida 8; Hotchkiss 7; Roxbury 7.

WM. U. SWAN

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Yale Ascends College Outboard Throne

YALE UNIVERSITY, in its first appearance in the competition, carried off the team championship in the third annual regatta of the Eastern Intercollegiate Outboard Association, at Lake Skaneateles, N. Y., June 24th–25th, after a desperate uphill fight that overcame Princeton's early lead in the very last heat on the two-day program. The Elis' margin over the Tigers was a mere 13 points, the closest finish in the three years the East has seen collegiate outboard devotees in formal competition.

The Blue's score was 5459, Princeton's, 5446. Third place went to Syracuse with 2453; then came Cornell, 2378; New York University, 2245; Duke, 1522; Rutgers, 1167; Franklin and Marshall, 685; Colgate, 678; Brown, 596; Clarkson, 421.

In the interscholastic section everything was Reece Hatchitt and the New York Military Academy. Hatchitt won the high point trophy for the second year in succession, took championships in Classes A, B and C, and was second in F simply because his throttle snapped off in the last heat and he had to finish by holding the gas control open with one hand while he drove with the other. The young Beechhurst, L. I., driver's sweep of the schoolboy events, in which he scored 4393 points of his team's 5478 total, gave New York Military Academy a runaway triumph in the team competition.

Princeton found solace from defeat by Yale's numerically superior forces in Roger Firestone's triumph in the individual competition. The Princetonian, scoring in eleven of the twelve heats on the program and spilling while in the lead in the other, amassed 3604 points to take the Commodore E. H. Patterson, Jr. high point trophy. Paul Sawyer, captain of the Yale team, was second with 2609 points. Lyman Spire, Syracuse's lone entrant, scored 2453; Warren G. Harris, of Cornell, 2378; Bill Rozett, Jr., of N. Y. U., 2245, and W. B. Elliott, Firestone's teammate, 1842.

The crew of St. Mark's School, which won the Interscholastic title. Left to right, Carmann Newberry, Capt. E. Dwight Fullerton, Jr., and Robert A. Knowlton

Dartmouth, which won the team title in 1931, and Jack Hamel, the Green captain who took high point honors, did not defend. Circumstances over which Hamel had no control kept him out of the strife, but he joined the race committee and developed into a first-class chronometer reader.

Poor weather conditions — rough water and a stiff breeze the first day and rain and bumpy going the second — militated against exceptionally fast performances, but one record fell and another barely escaped eclipse. Guy Ellsworth, of Duke, with speeds of 44.665 and 44.887 m.p.h., wiped out Bill Crawford's Class F mark of 43.4 made last year with a Johnson "E." The fastest driving was done by Ken MacKenzie, of New Haven High School, who paced the schoolboys in two heats of Class F with clockings of 45.801 and 46.272 m.p.h. The latter time, made in five circuits of a one-mile course, is only 35/100ths of a mile slower than the record made over a 2½-mile oval last year by Walt Widegren.

EVERETT B. MORRIS

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"Miahelo II" Wins San Francisco-Long Beach Race

A BRIEF rift in the fog that proved all wrong for the leading cruiser and just right for the runner-up, near the end of a 200-mile overnight drive down the Pacific Coast, determined the winner of the fourth annual 374-mile all-California power boat race, San Francisco to Long Beach, July 1st to 4th. For John J. Hollenbech and his 43-foot Scripps-powered *Miahelo II*, the fog lifted just long enough to allow a perfect fix at Point Conception, permitting a neat course to Santa Barbara and enough gain to win the race. To Arthur N. Macrate, well in the lead on last year's winner, the 52-footer *Zoa III*, the fog's vagaries made Conception look like Point Arguello, which was hidden in the murk a dozen miles astern, and he altered his course to seaward, lost his advantage, and finished second in the fleet of six.

Of interest to cruiser owners everywhere is the handicapping scheme tried in this contest for the first time and given a unanimous vote of approval. To avoid the disadvantages of a long race at wide-open engine speed, and also the arguments that frequently follow the use of the rather intricate past performance handicap rules of the American Power Boat Association, the committee called machinery to their aid. Each owner picked his preferred speed, which in each instance was well under the cruiser's maximum, and the committee fixed and sealed a mechanical gadget on the carburetor so it could not be opened wider than the set amount. The cruiser was then run over a measured nautical mile and the maximum speed recorded.

This speed, multiplied by the distance, was the cruiser's theoretical time for the race, and the handicaps were figured accordingly. Thus mechanically restricted, the cruisers ran "wide open" and faced no further time penalties. Only one penalty was possible — disqualification for breaking the seal. Yet in case of a bad storm the craft's full power was available for safety's sake merely by removing the gadget and retiring from competition.

Carded as America's longest distance open water power boat race, the contest was run in three legs: San Francisco to Monterey, 84.3 nautical miles with an overnight stop; Monterey to Santa Barbara, an overnight run of 201.2 miles followed by an overnight stop, and Santa Barbara to Long Beach, 88.4 miles. The Long Beach Yacht Club officiated with coöperation of the Santa Barbara, Monterey and St. Francis clubs. All the contestants, except *Zoa III*, raced in the 10-to-14 knot class. Details of the contestants in the order of finish and therefore of final standing are as follows:

Yacht	*Length*	*Owner*	*Club*	*Elapsed Time*
Miahelo II	43	J. J. Hollenbech	Oakland Y. C.	31:14:13
				1st Prize
Zoa III	52	A. N. Macrate	Long Beach Y. C.	22:41:43
				Special Class
Tapawinga II	55	F. A. Cressey, Jr.	St. Francis Y. C.	33:24:21
				2nd Prize
Lightnin'	43	E. J. Arkush	St. Francis Y. C.	31:12:51
Folly II	64	J. C. Marino	St. Francis Y. C.	30:02:56
Lady Bess	42	C. W. Haswell	Corinthian Y. C.	39:03:21

THURBER W. CUSHING

A drawing of the "Vraad," which crossed the Atlantic, from east to west, in 1904. She was built of galvanized iron plates

Canadians Retain Douglas and Emerson Trophies

CANADIAN dinghy sailors successfully defended the Douglas and Emerson international trophies against American invaders from the Rochester Yacht Club in races held at Toronto, July 1st to 4th. Although these cups have been retained by sailors from Toronto for many years, American chances are steadily improving, and this year the Emerson Cup series was very closely contested.

In the series for the Douglas Cup, a two-boat affair, R. C. Y. C. sailors scored a decisive victory by two straight wins, thus closing the series.

The National Y. C. of Toronto were the defenders in the Emerson Cup series, which was sailed by four boats. In the first race, which was lost to the Canadians by a foul on the part of the first yacht to finish, the Americans emerged with a score of 8 points to their rivals' 2. By placing first and third in the second race, the Canadians brought their score to 9, the score of the Americans standing at 12.

Here a question of procedure entered. In previous races for this trophy the Canadians have won decisive victories, so that more than two races have not been sailed. With a score of 12 to 9, there was some uncertainty as to whether a third race should be sailed, but examination of the deed of gift proved this necessary.

The deciding race proved a real battle for the Canadians, who had to place first and second in order to win. Dr. Vaughan, of the Rochester team, led at the start, but was unable to hold his lead and dropped far behind in the latter part of the race. This left his team mate, Loysen, at a great disadvantage, but fine sailing on his part made the race a very close one, the finishing times of the first three boats being a matter of seconds.

The Douglas Cup races and the first two of the Emerson series were sailed in strong winds, but in the third race of this series light to moderate breezes prevailed.

The Lake Sailing Skiff Association regatta was held over the same week-end. Over forty boats took part, seven of which came from Rochester. Ten upsets and some gruelling racing in heavy winds and rough waters were the high lights of the regatta.

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The End of a Famous Craft

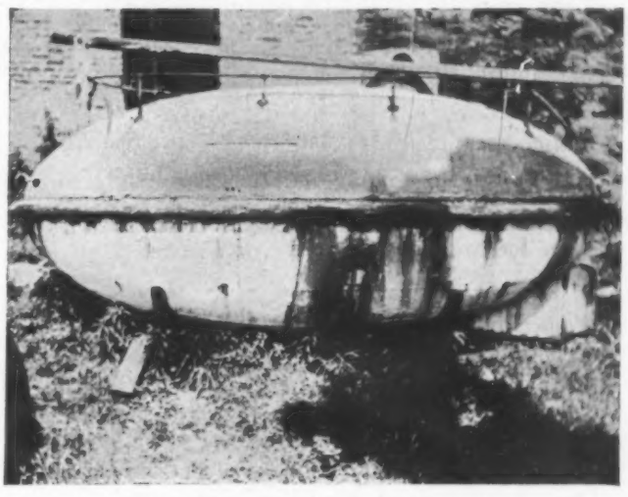
THE series of articles in YACHTING some time ago on adventurous voyages in small boats brought to the knowledge of the yachting world the resting place of the *Tilikum*, and the end of her famous skipper, Captain Voss. Now it brings us news of the resting place of the *Vraad*, which was sailed across the Atlantic in 1904 in 221 days. A letter from Edward Cock, of Hong Kong, brings the first photograph of this strange craft we have seen, and an account of how she happened to be rusting away in that distant part of the world. The writer says:

"I have intended for some time to send you photographs of what must be *Vraad*, referred to in your article *Adventurers All*, by Charles H. Hall in YACHTING, November 1930.

"The boat in the photograph is lying at the Kowloon Docks of the Hong Kong and Whampoa Dock Company, having been left here before I joined the Company, eleven years ago.

"I am not able to trace much of her history and, of course, it is possible, though hardly likely, that more than one of these craft was built. She was left here by the captain of a Norwegian ship. To give an idea of her size, a two-foot rule was placed on her side before she was photographed. The mast is in a tabernacle and the boat is fitted with a double bottom. The conning tower is plainly seen."

This is, without doubt, the *Vraad*, and the pictures make one wonder more than ever at her successful Transatlantic passage of 28 years ago.



The "Vraad," now lying at Hong Kong

A Matter of Fair Play

Some Questionable Points in the Interpretation of Rules 31 and 32

By GEORGE E. HILLS

Chairman, Race Committee, Hingham Yacht Club

DR. C. SHERMAN HOYT'S interesting article in the April issue of YACHTING in regard to the ambiguity of the third paragraph of Rule 30, of the racing rules, prompts me to invite discussion of situations which sometimes arise under some of the other racing rules.

Protests under Racing Rules 31 and 32 are rather uncommon and yet there is one situation which not infrequently arises and which is of more than academic interest.

Let us assume the following situation (see diagram below):

FACTS IN THE CASE

Boats "A" and "B" are overlapped, close-hauled on the same tack.

No question of overtaking is involved.

"X" is an anchored vessel 150 feet in length, with clear water all around her.

"A" can just "lay" the mark and clear "X's" stern without altering her course. Both "A" and "B" are "about to pass an obstruction," and "B" is rapidly approaching a position in which an immediate and appreciable alteration of course will be necessary to avoid a collision either with "X" or with "A."

"B" hails "A" for room to pass under the stern of "X." "A," knowing that if she gives "B" room, she ("A") cannot weather the mark without tacking, and remembering that by the last sentence of paragraph one of Rule 32 she would have no right then to hail "B" about, refuses to bear off.

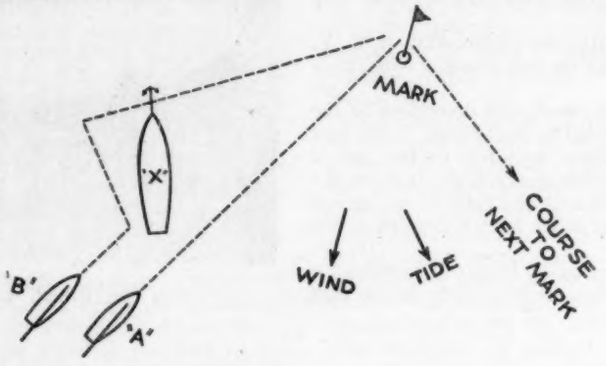
"B" therefore tacks, passes to windward of "X" and protests "A" under Rules 31 and 32.

The parts of Rules 31 and 32 pertinent to the case are as follows:

RULE 31

Giving Room at Marks or Obstructions to Sea Room

"If an overlap exists between two yachts when both of them, without tacking, are about to pass an obstruction to sea room, or a mark on the required side, the outside yacht must give room to the yacht in danger of fouling such mark or obstruction, whether she be the windward or leeward yacht, provided the yachts are overlapping on actually reaching such mark or obstruction. A craft under way (including another yacht racing) of which the yacht concerned has to keep out of the way, ranks as an obstruction for the purpose of this or the following rule."



RULE 32

Close-Hauled, Approaching an Obstruction to Sea Room or a Mark

"If two yachts are standing close-hauled on the same tack towards the shore, or an obstruction to sea room which requires the leeward yacht to alter her course to clear it, and if she is not able to tack without coming into collision with the yacht to windward; the latter shall, on being hailed by the person in charge of the leeward yacht, at once allow her room to tack. A yacht so claiming room shall be bound to tack immediately her hail is responded to. If the leeward yacht elects to clear the obstruction by bearing away she shall allow the windward yacht room to do the same if she so desires. But if the obstruction is a mark of the course the leeward yacht has not the right to so hail the other about if that other can herself pass the mark without tacking."

The three essential conditions requisite to invoke Rule 31 are:

1. Overlap on actually reaching the mark or obstruction.
2. Both yachts, without tacking, about to pass the mark or obstruction.
3. Inside yacht in danger of fouling the mark or obstruction.

Let us for a moment endeavor to ascertain what is meant by each of these three essential conditions.

"Overlap" would seem to mean that the inside yacht cannot transfer herself from the inside berth to the outside berth without (a) Fouling the outside yacht, or (b) Checking her speed so as to fall off into the wake of the outside yacht.

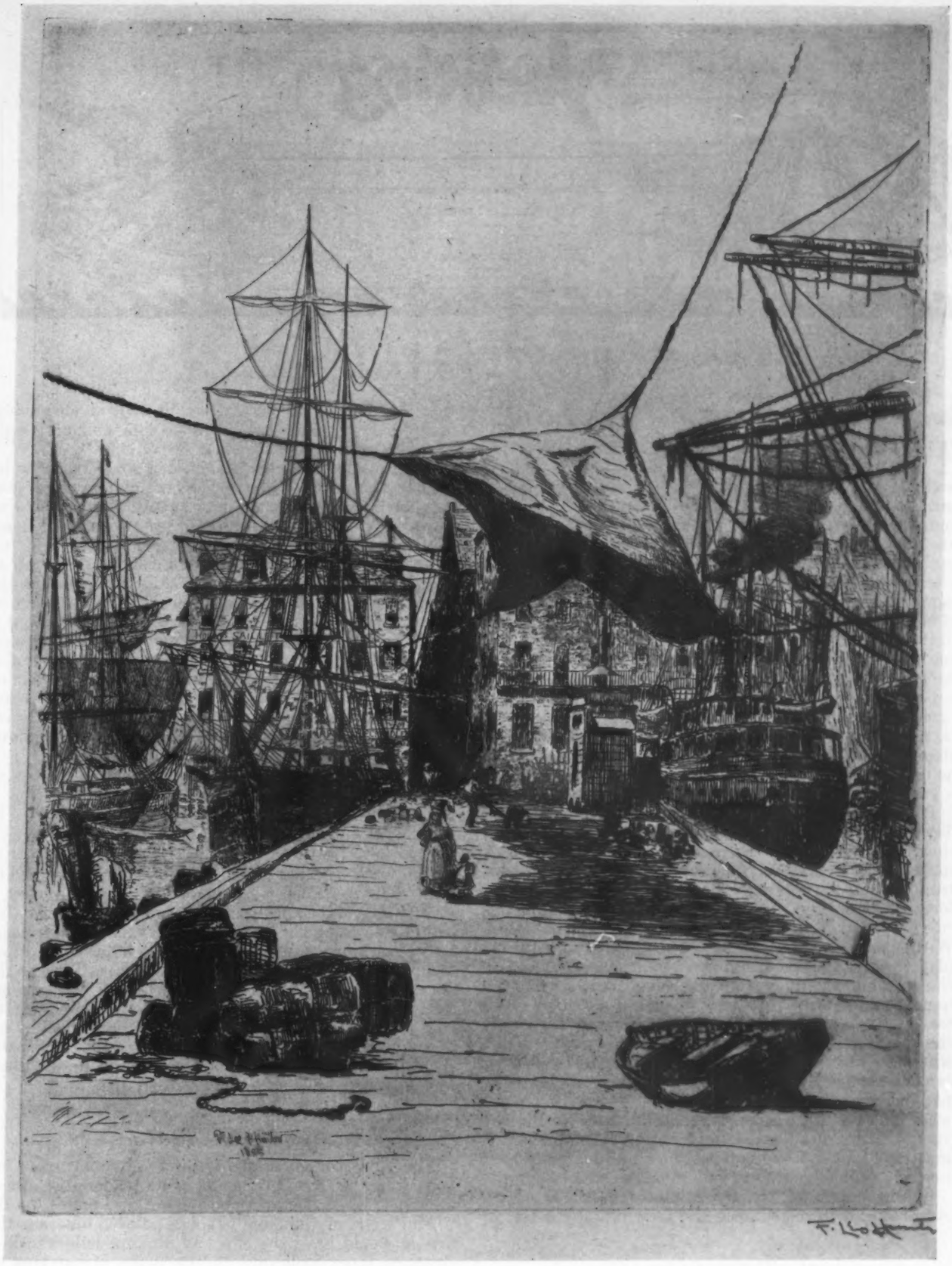
"Without tacking" would seem to mean that the yacht nearer the obstruction would not be obliged to tack could she ignore the outside yacht.

"Danger of fouling" — The meaning of this phrase I shall discuss later.

The three affirmative, essential conditions requisite to invoke Rule 32 are:

1. Close-hauled on the same tack.
2. Approaching an obstruction.
3. Alteration of course by leeward yacht in order to clear obstruction either by (a) tacking (in which case she cannot avoid fouling the

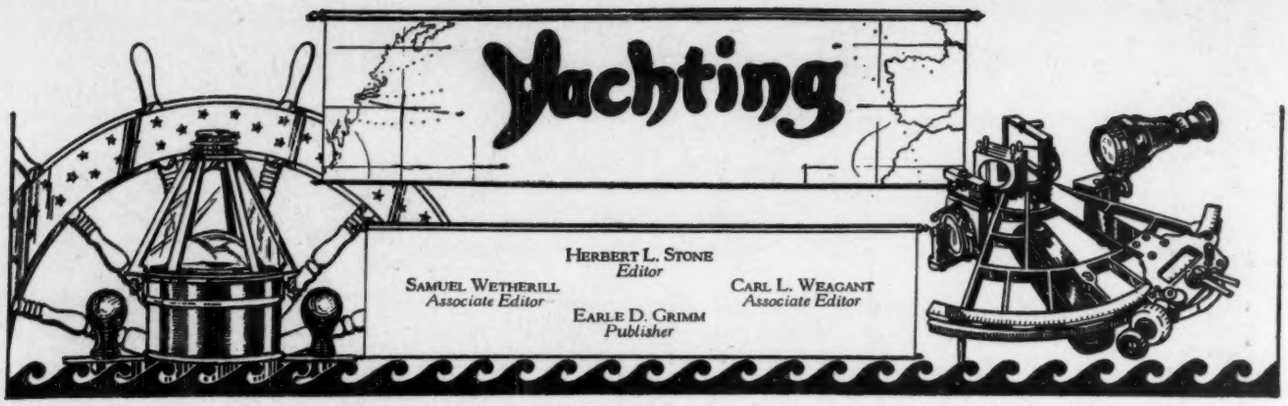
(*Continued on page 82*)



Old East India Wharf, New York, in 1885

From an etching by

F. Leo Hunter



EDITORIAL

A Tribute

THE Bermuda Race this year was marred by the first tragedy since the event was inaugurated away back in 1907. The unfortunate burning of the *Adriana* and the attendant loss of Clarence Kozlay, a well known and extremely capable sailor, was deeply felt by everyone in the race. That the rest of the crew of the burned yacht were saved by the prompt action and skilful seamanship of one of the other contestants, and the self-sacrifice of Kozlay himself, exemplifies the courage of those who go to sea in small yachts and their loyalty to the highest tradition of the sea. That the task of rescue should have fallen to the lot of Captain Robert Somerset, of the little British cutter *Jolie Brise*, who had sailed across the Atlantic just to take part in this race, had a touch of fate in it, and though his quest was thereby thwarted, we know that the Commodore of the Royal Ocean Racing Club would rather have done what he did than to take any trophy for the mere winning of a yacht race.

It was several hours before daylight on the second day out that the crew of *Jolie Brise* sighted a flare astern that they were unable at first to make out, though a rocket soon convinced them that someone was in trouble. Without a moment's hesitation Bobby Somerset forgot the race and turned back to help. Arriving alongside, the task of saving the crew called for quick action. Without a moment's indecision, and with a superb display of skill and seamanship, he took his vessel alongside the burning yacht, despite the rough sea, so that all hands could jump to safety on the *Jolie Brise* — all except Kozlay, that is. With mainsail down covering the deck, and the jib in tatters, Kozlay stuck to the wheel to keep *Adriana* under control as *Jolie Brise* ranged alongside to leeward. Only when all his companions were safe on *Jolie Brise* did Kozlay leave the wheel to save himself. It was then too late, for the two yachts had drifted apart, and he fell into the sea. A matter of four or five seconds sooner, and he would have made it. Of such stuff are sailors made.

We pay tribute to the gallant helmsman of the *Adriana* and to the skipper and crew of *Jolie Brise*.

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The Hazard of the Game

The loss of a boat by fire should not be construed as an undue hazard of ocean racing. It might have happened if the yacht had been on a cruise, and in this event, the chance of rescue would have been infinitely less than with competitors around to go to the rescue. Rather it is the hazard of the sea. There is an old saying among seamen that if you go to sea long enough it will "get you" sooner or later.

That there is an element of risk in these races, or in going to sea in a small boat, goes without saying. Now and then a vessel or a man may be lost. It is part of the game. But provided all safeguards are taken, there is no more risk than in many another sport — football, for instance, or riding to hounds. What calls for the greatest vigilance is in seeing that the yachts participating are properly manned. This is often hard to do, but there is more hazard through inexperienced personnel taking a small boat to sea than in anything else. A case in point is the *Curlew*. Though the yacht herself was not of a suitable type, not one of her crew had ever had offshore experience. Yet the boat brought her tyro crew home safely, after giving everyone interested a touch of heart failure. Such an inexperienced crew should never have been allowed to start in a race of this character.

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Pay Your Yacht Tax

Those of you who own yachts over 28 feet in length had better scurry around and pay the tax on them that was imposed by Congress in the Revenue Act passed in June. This tax must be paid before August first or a penalty may be slapped on any delinquent owner. No notification has been sent to yacht owners and, as usual with governmental bureaus, everyone liable to taxation is supposed to find out for himself when and where the tax must be paid. The tax is collected by the Internal Revenue Collection Bureau in the district in which the boat owner resides. So hunt up your local collector, get from him and fill out form 732, and when the tax is paid, keep the receipt on board your boat at all times. Otherwise you may be let in for a lot of trouble.

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No Danger of Becoming Foolhardy

The over-worked staff of this family magazine has been freely criticized by some of its readers because of an article by that stormy petrel, "Alf" Loomis, on the "Gentle Art of Quitting." It was pointed out that this article would have the effect of making sailors in long distance races foolhardy to the point of carrying on long after prudence dictated that it was time to quit and seek needed shelter. The result of a recent long distance race on the Atlantic Coast in which 18 out of 22 starters withdrew, will, we believe, confute these critics. No danger of anyone becoming foolhardy as long as there is a port to leeward to duck into.

IN THE WORLD OF YACHTING

FRANK C. PAINE

HERE we have Frank C. Paine, a "Down East" yachtsman who was skipper of the cutter "Highland Light" in her record-breaking drive to Bermuda last month. Not only did he sail his boat (which he had under charter) from Montauk to St. David's Head in under three days — hours faster than it had ever been done before in this race — but he was also responsible for her design.

While known chiefly as a successful helmsman of racing boats, Frank Paine took to ocean racing last year, when he sailed in "Highland Light" on the Transatlantic Race, in which she finished in third place. This year, to the best of our knowledge, was his first Bermuda Race.

Frank Paine comes by his yachting naturally. His father was General Charles J. Paine, of Boston, who was largely responsible for the defense of the America's Cup in 1885, 1886, and 1887, when he had built and managed the famous sloops "Puritan," "Mayflower" and "Volunteer." It was General Paine who organized a syndicate in 1885 to build a boat to meet "Genesta," and he went to Edward Burgess for the design. The result was "Puritan." So successful was "Puritan" and the two boats that followed her that Burgess, then practically unknown outside of New England, at once took rank among the foremost naval architects of this country and became famous from coast to coast.

Brought up in an atmosphere of yachting, Frank Paine took to sailing boats at an early age as a duck takes to water. Later, becoming interested in naval architecture, he began designing boats as an avocation. He turned out many successful boats in the smaller rating classes, and some years ago he took up yacht designing as a profession. He was a leading member of the syndicate that campaigned the America's Cup candidate "Yankee" in the 1930 race, sailed on her in most of her races, and his firm designed her.

The list of boats he has owned is long and varied, and includes many successful 20- and 25-raters and the 8-metre "Gypsy," which defended the Seawanhaka Cup in 1929. His yacht club affiliations are the New York and Eastern Yacht Clubs, the Corinthian, of Marblehead, and the Seawanhaka, of Oyster Bay.

Under the Lee of the Longboat

by Cap Stan

WELL, those prognostications on the Bermuda Race were a little better than usual, what? The only real surprise was *Twilight* taking second in Class B over *Viking* and *Malabar V*. *Mistress* did better than she has done in any previous race, so far as elapsed time was concerned, but fell down when allowances were figured. Neither *Teragram* nor *Dorade* quite came up to expectations — a little light weather now and then might have helped both of them. *Viking* was a flop. *Ayesha*, fresh from the builder's yard, did a neat bit of sailing for a centerboarder.

The joke of the race was when *Spanish Rose*, a half-pint size centerboard Bermuda sloop, stood by *Amberjack* the first night when the latter was in trouble, *Amberjack* being a veteran of both the Transatlantic and Fastnet races of last year.

It was very definitely a "big boat" race, the fresh breezes being too much for the smaller craft to make a showing.

Dainty played in hard luck. First a bad leak developed up forward below the water line, which her competent crew succeeded in repairing. Later another bad leak showed up, so that being barely able to keep ahead of it with two pumps going steadily, she was headed for St. David's under power. It developed that the second leak was caused by a hull fitting below the water line completely corroding away in an unexplainable manner.

While everyone else seems to be "going Marconi," John Alden sticks to a gaff-header and cleans up. That makes it three out of five for gaff-headed *Malabars* — 1923, 1926, and 1932. Incidentally, the first four boats in Class A, and second in Class B, were Alden-designed.

For close finishes, both on elapsed and corrected time, this race would be hard to beat. Glance at the times in both Class A and Class B and you'll see what I mean.

Owners of average cruising boats, not built to anybody's rule, will get a lot of encouragement out of the fact that boats specially designed under the Bermuda Race Rule failed to finish in the money, with the exception of *Dorade*.

Bermuda Race winners of the past six races have been limited in size to between 45 and 59 feet over all length. Here they are, with their lengths: 1923, *Malabar IV*, 46′ 10″; 1924, *Memory*, 59′; 1926, *Malabar VII*, 53′; 1928, *Rugosa II*, 59′; 1930, *Malay*, 45′; 1932, *Malabar X*, 58′. Thus it would seem that boats under 45 feet and over 59 feet over all have little chance of winning the coveted trophy. Which may, or may not, explain why various of the larger boats built recently, some designed especially under the measurement rule, have failed to show — such as *Highland Light*, *Mistress*, *Barlovento*, *Brilliant*, etc. It's a rather odd situation, with no satisfactory explanation so far.

Here's another peculiar situation: *Duckling* has won both of the Cape May Races of the Corinthian Y. C. of Philadelphia, but has never made a showing in a Bermuda Race. Still another: *Dorade* won the Transatlantic and Fastnet races in impressive fashion, yet in two Bermuda races has had to be content with third and seventh places. So apparently there is no telling what will happen in ocean racing, past performances often being misleading.

Genoa jibs, as cut at present, are a doubtful blessing in ocean racing. The minute the sea makes up they shovel up a ton or so of water, and split. Several were carried away in the race. Others were lowered in the nick of time — not because of the strength of wind, but because they couldn't carry a bow wave. Smaller jibs, with clews cut higher, would probably be a better bet.

Viking's crew reported that they had continual trouble with the lashings of the mainsail slides chafing off, and that they had to lower away five times to make repairs. This is quite a rare occurrence in any ocean race, which leads to the conclusion that there must be something wrong with the slides, or with the way they are rigged.

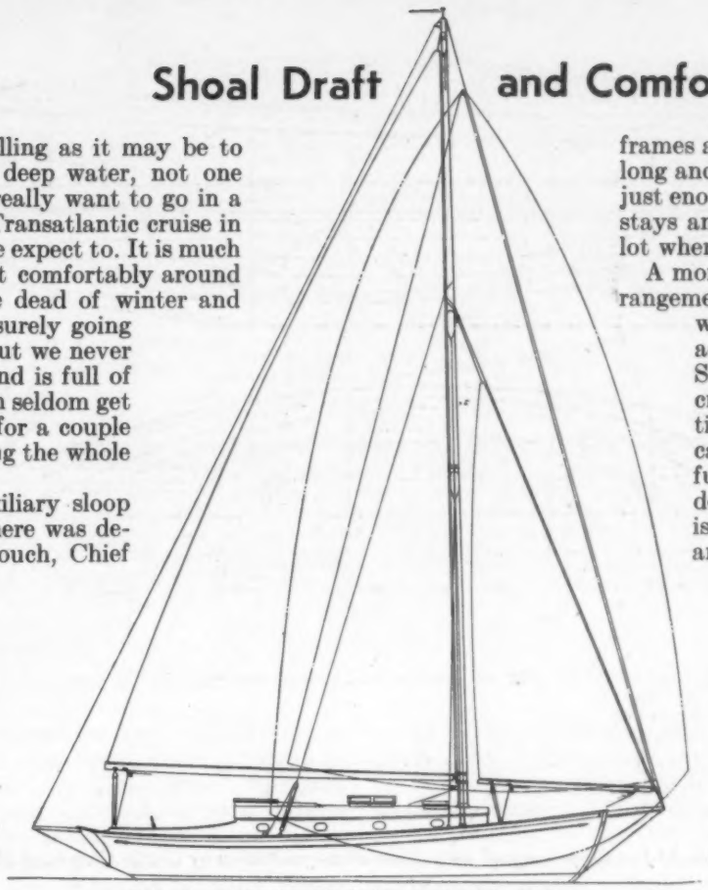
It was certainly a tough break to lose Clarence Kozlay. "Koze" was a well-liked member of the Cruising Club, owner of the fast yawl *Gleam*, and a thoroughly experienced and competent sailing man who loved the sea and boats. That someone is sure to go, sometime, is thoroughly understood by all those who know and appreciate deep water racing. That a man of Kozlay's capabilities should be lost will make it clear that ocean racing is not mere child's play, but a man's job, with its attendant risks to life and limb, just as in many other sports. What a paradox it is that a green and inexperienced outfit, such as *Curlew's* crew, should flounder around for ten days and come home unscathed!

(*Continued on page 74*)

Shoal Draft and Comfort

GLORIOUS and thrilling as it may be to cruise and race in deep water, not one out of a hundred of us really want to go in a Bermuda Race or on a Transatlantic cruise in a small boat — nor do we expect to. It is much more to our liking to sit comfortably around the clubhouse fire in the dead of winter and talk about how we are surely going to do it next summer. But we never do. As a result, the Sound is full of deep water cruisers which seldom get beyond Lloyd's Harbor for a couple of week-end cruises during the whole season.

The little 33-foot auxiliary sloop whose plans are shown here was designed by George F. Crouch, Chief Naval Architect of Henry B. Nevins, Inc., for a New Haven yachtsman who wanted a boat suitable for Long Island Sound, yet able enough to go along comfortably and safely in heavy weather if need be. He stipulated that the draft must not exceed three feet with the centerboard raised. With this shallow draft she can enter safely many a little harbor from which the deep keel boat is barred. In the secluded harbors of Connecticut and along the North Shore of Long Island; far up the Severn River, at Annapolis, and a hundred other shallow estuaries of Chesapeake Bay along whose shores are the white houses of quiet old villages in groves of great oak trees; in Great South Bay, and in the small ports on the Maine coasts, there is an intimate and restful charm for those who find enjoyment in getting out of the beaten path. This boat is ideal for this purpose, for it is an unusual combination of comfort, seaworthiness and speed.



Sail plan of the Crouch-designed, shoal draft sloop

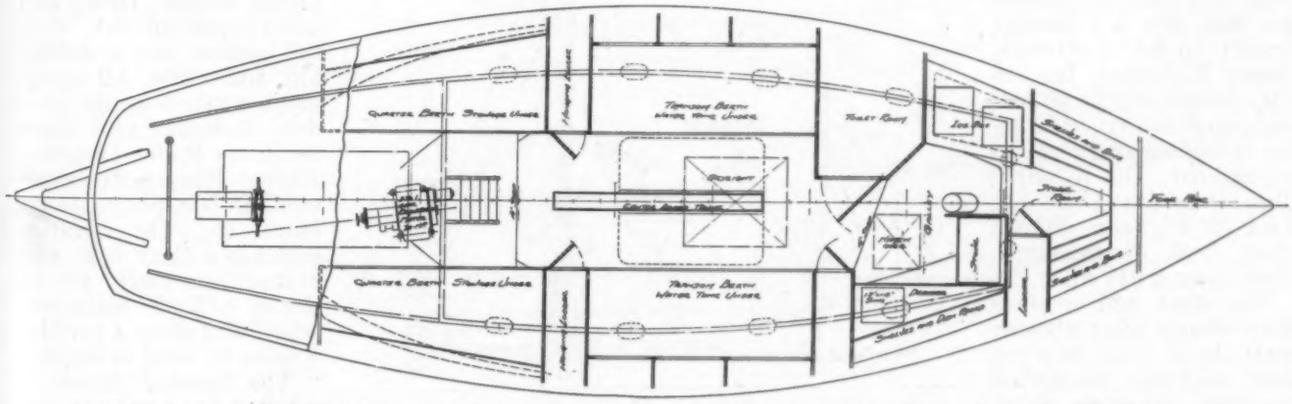
In order to carry sail at a moderate angle of heel a powerful midsection is used. At the same time, the lines of the hull are very smooth and easy. Displacement is liberal, which permits heavy construction with a moderate amount of outside lead and additional inside ballast. To keep the cost of construction low, no reverse S-shaped frames are used. The keel is fairly long and the forefoot is cut away just enough so she will be quick in stays and yet not be all over the lot when left to herself.

A more or less conventional arrangement is shown, which has worked out very well in actual cruising conditions. She can carry four on a cruise of indefinite duration and every one aboard can live in comfort. She has full six feet headroom under the carlins, and there is headroom in the galley and over the ice box. Some may criticize the way the designer has carried the house forward of the mast, but many boats have been in use for over a quarter of a century embodying this very feature and are as good today as they ever were. The construction at this part of the house will be reinforced with a steel frame and steel knees.

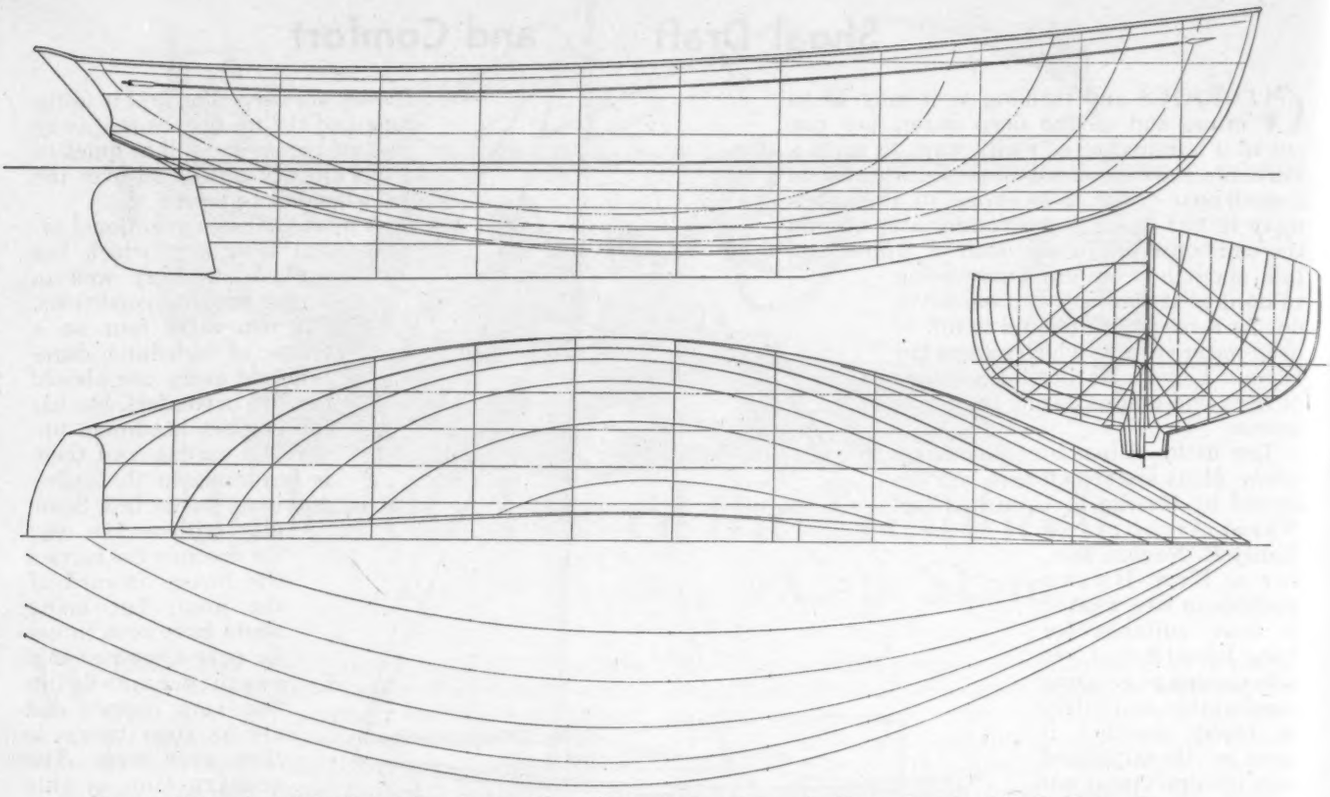
The sloop rig is shown because that is the one preferred both by the designer and prospective owner, but she could be rigged as a yawl and would perform perfectly under that rig. A roller reefing gear can be used, which will do away with most of the objections to the sloop rig.

After watching the action of the small, high speed motor and reduction gear in auxiliaries, the designer is much in favor of this type of power installation for any boat in which the power is secondary to the sails. It is very efficient, most compact, and will drive the heavy boat eight miles an hour.

The principal dimensions are as follows: l.o.a. 33′; l.w.l. 27′ 2″; beam, extreme, 11′; beam, water line, 10′ 5″; freeboard forward, 4′ 2″; freeboard aft, 2′ 10″; least freeboard, 2′ 6″; sail area, 645 sq. ft. With a jib topsail and plenty of light sails, she should make a strong bid for honors in the long distance races for cruising craft.



Interior accommodation plan of the 33-foot centerboard sloop designed by George Crouch for a Connecticut yachtsman



Lines and body plan of the 33-foot sloop designed for a Connecticut yachtsman by George Crouch, of H. B. Nevins, Inc.

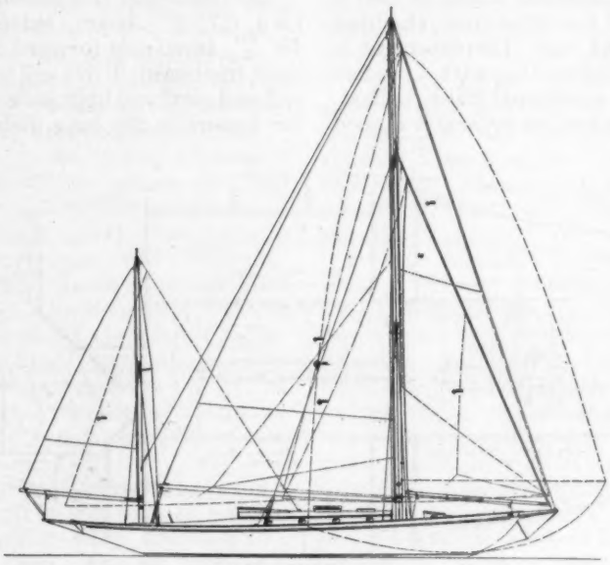
"Ayesha," a Successful Centerboard Cruising Yawl

IT IS more or less of a rare occurrence for a moderate draft, centerboard craft to make a good showing in a Bermuda Race. It is even rarer for the crew of a centerboarder to come ashore after a hard 630-mile contest singing loudly in praise of their craft. But this is exactly what happened in the case of the 46-foot yawl *Ayesha* in the race just concluded. Fresh from the builder's yard, with sails and rigging not yet stretched and her crew entirely unfamiliar with their boat, *Ayesha* went out and sailed a fine race, taking third place in Class B, and aroused great enthusiasm in her crew over her fine behavior in hard ocean going.

Ayesha was designed by P. L. Rhodes for John R. Hogan, of Philadelphia, who does most of his sailing from Bayhead, on Barnegat Bay. She is a distinct credit to her builders, Henry B. Nevins, Inc., of City Island, N. Y., all material and construction being to the highest standards throughout. The principal dimensions are: l.o.a. 46′; l.w.l. 32′ 1″; beam, 11′ 8″; draft, hull, 4′; sail area, three lowers, 911 sq. ft.

The lines and sections show clearly what a sweet craft she is, with firm yet easy sections, moderate deadrise, sweeping sheer, nicely proportioned ends and good freeboard. The buttocks and diagonals are unusually easy for a shoal, rather wide hull. The beam, plus firm sections and outside lead keel, give excellent stability after a small initial angle of heel.

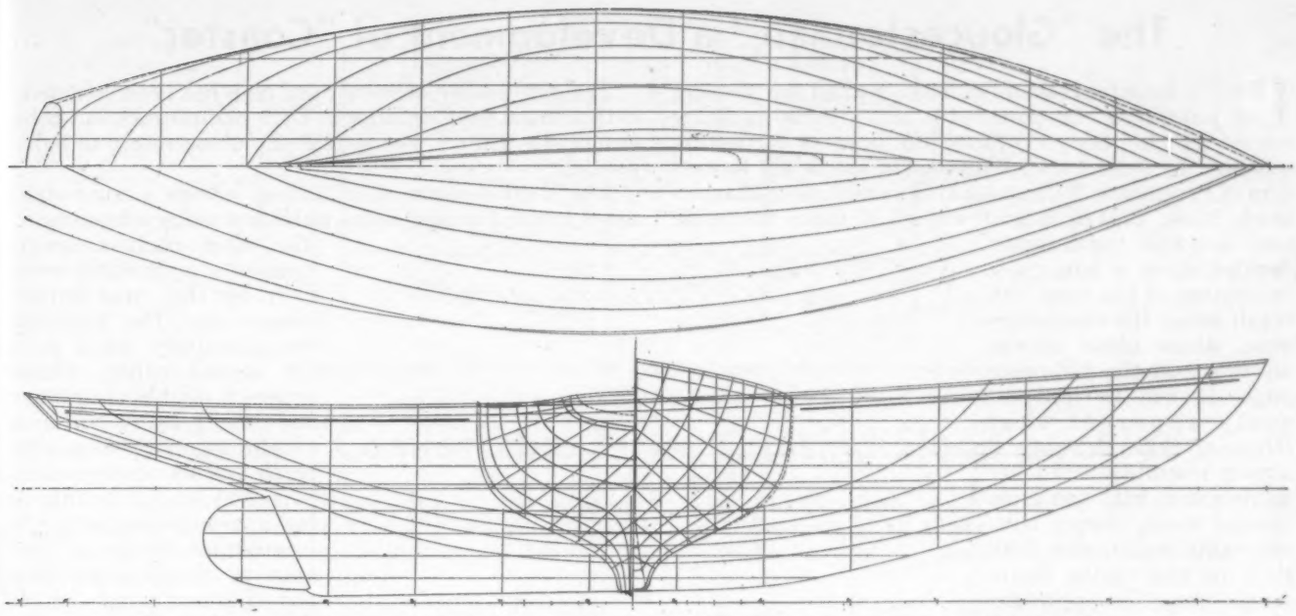
The jib-headed yawl rig has been proved both fast and easy to handle at all times. All spars are hollow, standing rigging is stainless steel, as are the turnbuckles, other hardware being of Everdur bronze. Monel metal tangs are used on the mast instead of rigging splices around the spar, the same metal being used in the galley for drain board and sink.



Sail plan of "Ayesha"

The hull is double planked with mahogany, fastened with Everdur bronze screws. Decks and cabin trunk are teak, while the interior trim is mahogany and white. All equipment is complete and up to date, including such items as Kaess Radio Direction Finder, Kenyon Speedometer and Log, Shipmate gas stove, etc. The auxiliary power is a Gray 4–35 with reduction gear, which drives a Hyde feathering wheel and gives a speed of 8 miles an hour or better.

The interior layout is marked by simplicity and



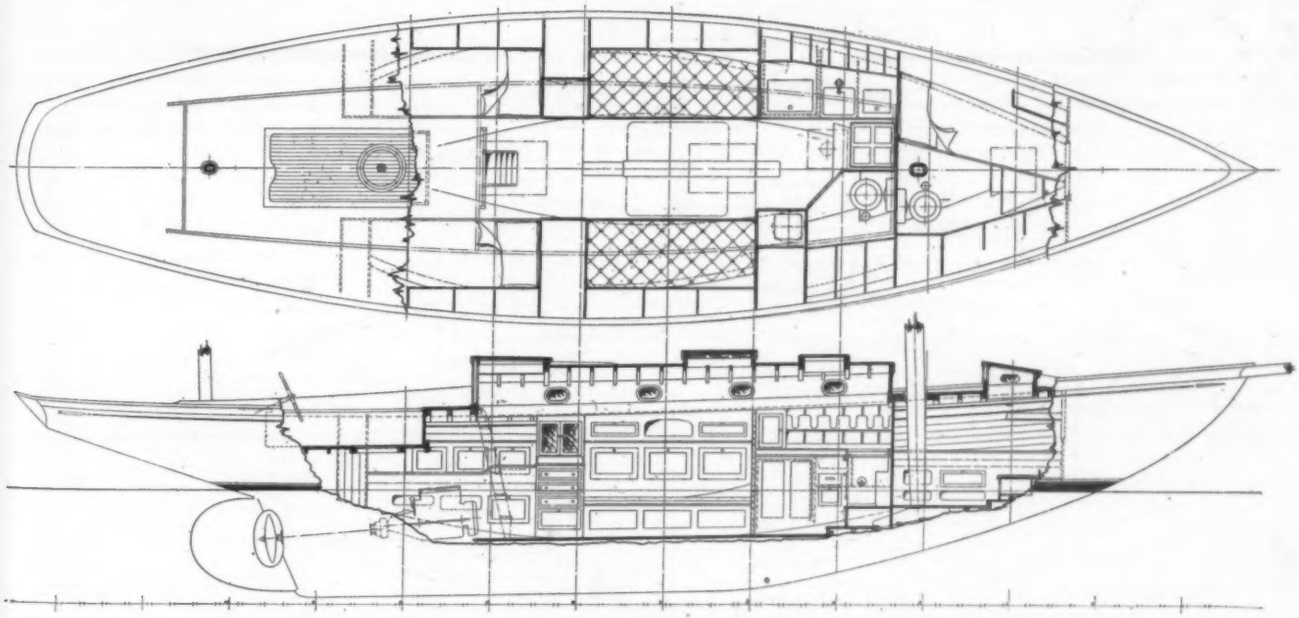
Lines and body plan of "Ayesha," designed by P. L. Rhodes for John R. Hogan, of Philadelphia

completeness of details. There are two quarter berths, four berths in the main cabin, toilet room, galley, and forecastle with second toilet for a paid hand. Bureaus, lockers, buffets, drawers and shelves have been worked in to provide a place for everything needed below decks.

Ayesha's crew are unanimous in their praise of this sightly newcomer. They believe her to be much faster than the race results show, time having been lost because of stretching rigging and sails, and the unfamiliarity of the crew with a new ship. She proved not only to handle perfectly at all times, but to be dry and comfortable, with a soft, easy motion in the toughest kind of going. Seasickness among the crew in the race was noticeable by its absence, "Porthole Pete" Chamberlain, the efficient amateur cook, being kept busy day and night feeding the ravenous sailors with necessities and delicacies alike.

On a boat of this size, with an easily-driven hull, the jib-headed yawl rig has many advantages. It ranks next to the cutter in speed, yet is moderate enough in area so that no single sail is too large for easy handling. When it is necessary to shorten down, reefing the mainsail, with the boom inboard, is far easier than reefing the main on a schooner — and the boat is proceeding on her course all the time, with jib and mizzen balancing nicely. For really bad weather, or squalls, jib and mizzen are sufficient both for speed and handiness.

A few years ago the controversy between adherents of the keel and centerboard types for going to sea engaged in some long drawn out discussions, with the keel crowd having somewhat the better of the argument. *Ayesha's* crew were all keel advocates, but now they are on the point of being converted into boosters for the shoaler type of craft.

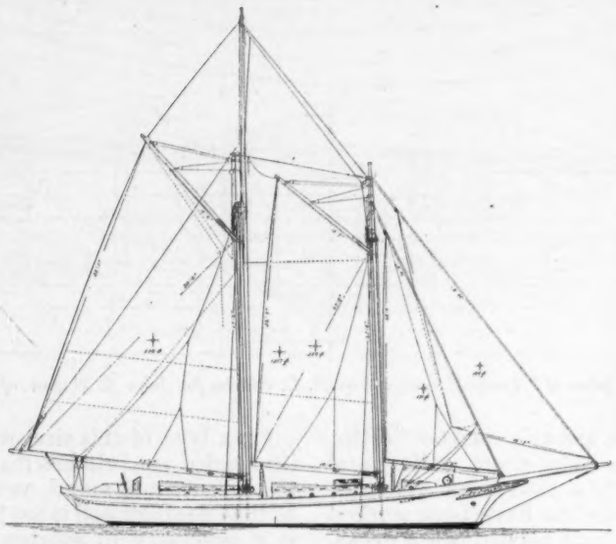


Inboard profile and accommodation plan of the Rhodes-designed 46-foot centerboard yawl "Ayesha"

The "Gloucesterman," a Development of "Coaster"

IN OUR issue for November, 1931, we had the pleasure of publishing the plans of a natty little auxiliary named *Coaster*, designed along the lines of a coasting schooner by Fenwick C. Williams, of the newly formed firm of Peterson & Williams, naval architects of Marblehead, Mass. This little craft caused so much favorable comment that the designer decided upon a larger development of the type, the result being the *Gloucesterman*, whose plans appear on this and the following page. It will be immediately apparent that *Gloucesterman* bears a strong resemblance to her predecessor, with the same general sheer, clipper bow, two cabin houses with flush deck in way of the mainmast, etc. The principal dimensions are: l.o.a. 51′ 6″; l.w.l. 42′ 6″; beam, 14′; draft, 8′; displacement, 61,000 pounds; iron keel, 15,000 pounds; sail area, four lowers, 1317 sq. ft.

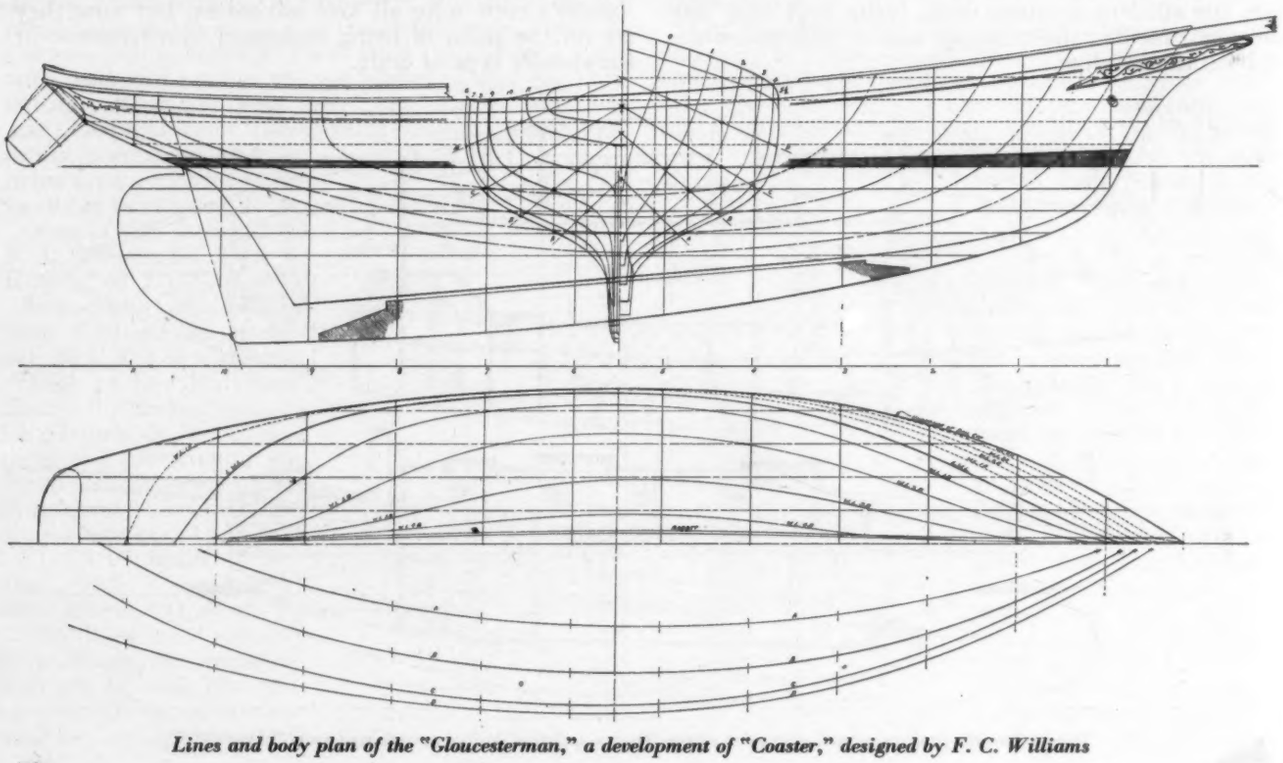
The lines and body plan show a sweet sheer and good freeboard, ample beam, firm sections, and long, sloping keel with deep forefoot. Though the entrance is by no means bluff, the displacement appears to have been carried well forward, resulting in a clean, smooth run. Judged by the performance of *Coaster*, she should stand up to her work in fresh breezes in fine shape, and show a fine turn of speed in all weathers, and be dry and comfortable into the bargain.



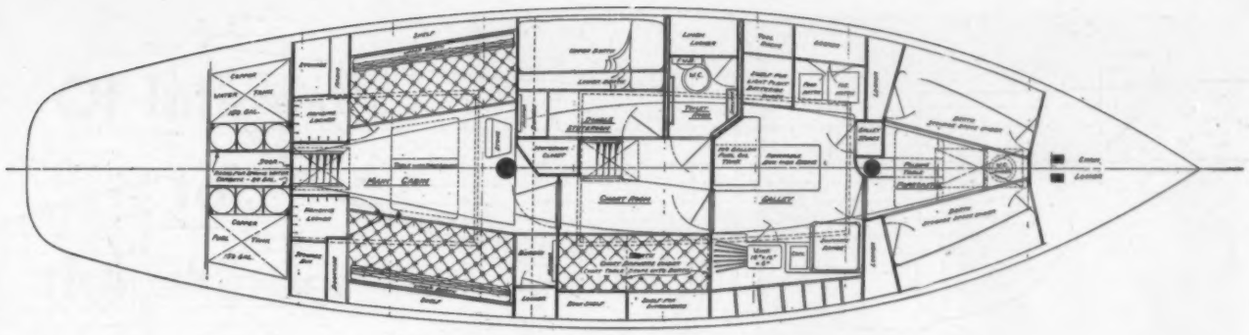
The "Gloucesterman," designed by F. C. Williams

The gaff-headed schooner sail plan has been retained, with a fitted topmast added. With maintopsail and fisherman staysail set, she should slip along nicely in light going.

The double cabin arrangement allows a somewhat novel interior arrangement which has many advantages. The after companionway leads to a main cabin with four berths, wardrobe, lockers, etc. The 'midship companionway leads into the second cabin, which houses a double stateroom and toilet room to port and combination passageway berth and navigating compartment to starboard. A big athwartships galley is located just abaft the foremast, in which is installed the auxiliary motor, which drives a Hyde feathering wheel. A roomy forecastle has two berths and second toilet. The lazarette contains tanks for 150 gallons of water and the same amount of gasoline, and also has racks for 30 gallons of water in carboys. An extra 100-gallon fuel tank is located in the galley compartment, so that what with ample lockers, shelves, bins, etc., for stores, *Gloucesterman* should be well able to take care of her crew on extended cruises without being dependent upon shore aid except at wide intervals. With topsail and fisherman staysail doused, she should go through the summer season without resorting to reefing.



Lines and body plan of the "Gloucesterman," a development of "Coaster," designed by F. C. Williams



Interior accommodation plan of the "Gloucesterman," described on preceding page

A Smart, Comfortable Little Cruising Sloop by Alden

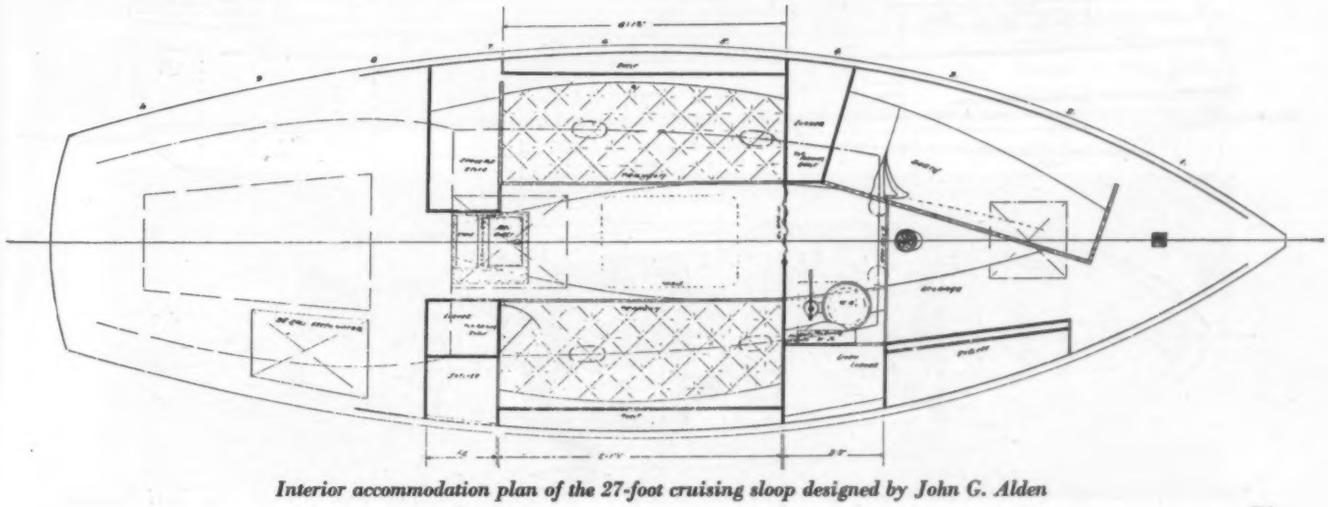
NOT content with turning out rugged schooners which have a habit of going out and winning Bermuda and other long distance races, John Alden frequently shows his versatility by producing able, fast and comfortable ketches, yawls and sloops of different types and sizes, with an occasional power boat thrown in for good measure. The plans on this and the following page are an instance. They show a snappy little cruising sloop with jib-headed rig which will accommodate three people comfortably, and cruise from port to port at a good pace whatever the weather conditions. The dimensions of this newcomer are: l.o.a. 26′ 8″; l.w.l. 21′ 6″; beam, 8′ 6″; draft, 4′ 8″; sail area, 420 sq. ft.

The overhangs are moderate, freeboard ample, and bilges firm, so that with her 4000 pounds of outside iron and a fair quantity of inside trimming ballast, she should carry sail well at a small angle of heel. The fore-and-aft lines are easy and symmetrical for so small a boat, and she should be a smart sailer, and easy to handle by one person at all times.

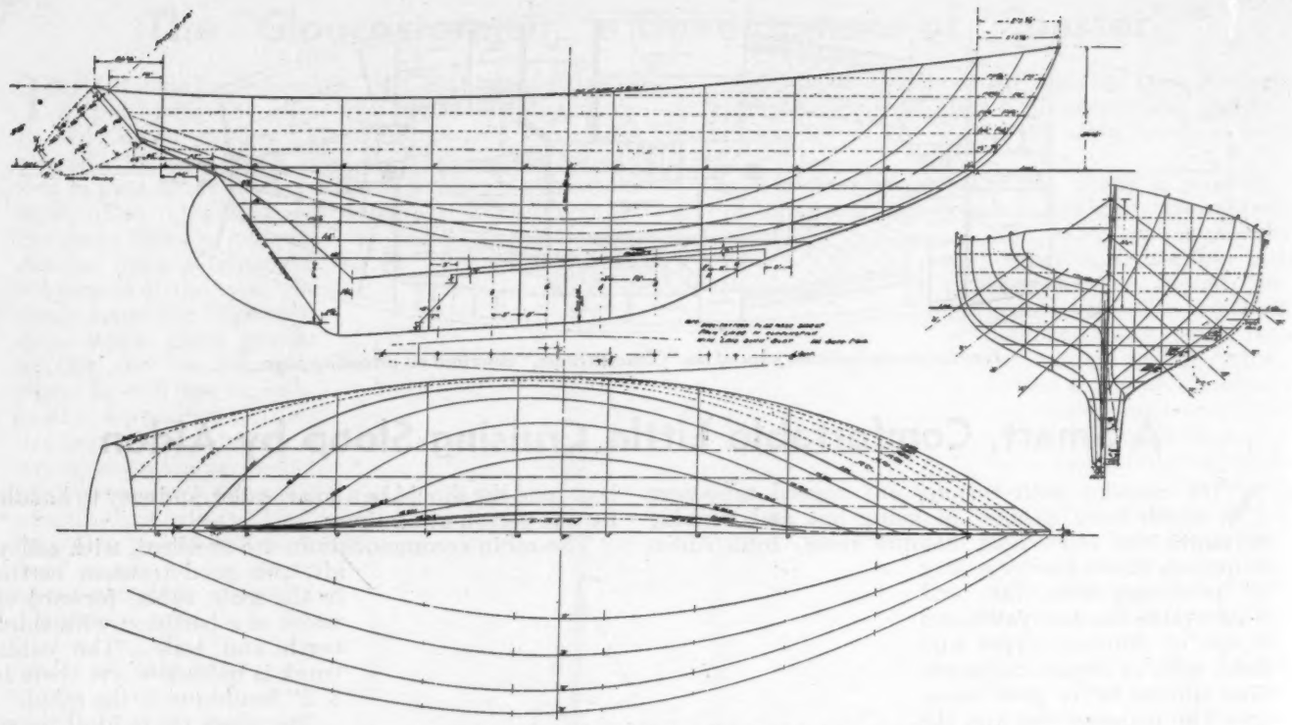
The cabin accommodations are excellent, with galley aft, two good transom berths in the main cabin, forward of which is a partition with third berth and toilet. The cabin trunk is quite low, yet there is 5′ 2″ headroom in the cabin.

The sloop rig is ideal on so small a cruiser on account of its simplicity, speed and ease of handling. Two of the main shrouds are led a bit aft, so that the single preventer is used mainly in heavy going, especially in a head sea, when it prevents any buckling of the mast due to the pull of the jibstay. There is good stowage space in lockers, bins, and on shelves, and with additional room aft, three people may cruise in comfort with a reasonable amount of duffle and supplies aboard. The rig is short on the base line, and with a roller reefing gear on the main, sail handling would be easy for a small crew in any weather.

Sail plan



Interior accommodation plan of the 27-foot cruising sloop designed by John G. Alden

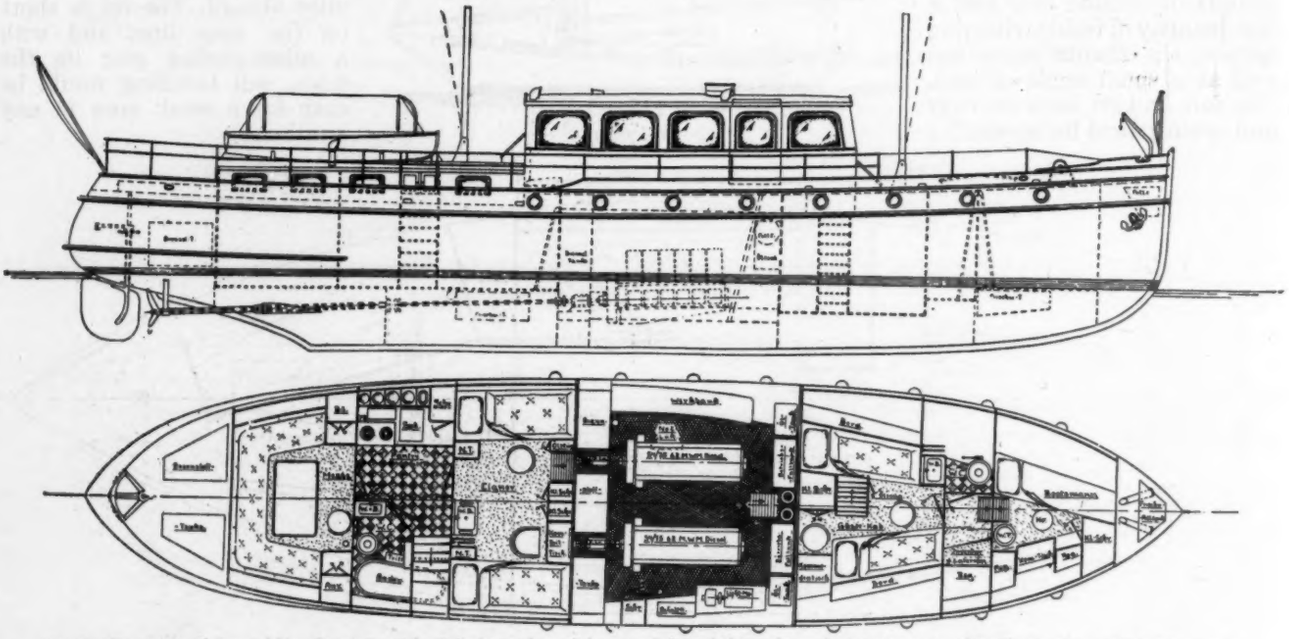


Lines and sections of the Alden-designed 27-footer, described on preceding page

A 60-Foot, Seagoing, Twin Screw Diesel Cruiser

THE plans below give a good idea of the European idea of a seagoing, motor-driven yacht with ample accommodations and great reliability. She is a 60-footer, built of steel, and was designed by Dipl. Jng. Karl Marconi, of Berlin-Spandau. Two 75 h.p. Diesel motors, made by Motorenworke Mannheim A.G., drive her at a cruising speed of 11 knots, and are fitted with remote control, so that the helmsman alone may maneuver the ship at all times without assistance. The fuel capacity allows of a 1200-mile trip without refueling.

Below decks, a stateroom is located forward of the motor compartment, with lockers and toilet room. In the after end of the ship is a fine main saloon, owner's cabin, bath room, etc. The main saloon may be used as a stateroom, in which case the large deck saloon may be used as a living room and dining saloon.



Outboard profile and accommodation plan of the 60-foot, twin screw, steel-hulled Diesel yacht designed by Dipl. Jng. Karl Marconi

Of Interest to the Skipper

"Goosander," a 60-foot motor sailer designed by Wm. H. Hand. A Hall-Scott engine furnishes power

Evinrude Motor on Arctic Expedition

ON lonely Cape York, in North Greenland, where towering mountains rise out of an icy sea, a lofty monument will be raised this summer. Thus fittingly does the Peary Memorial Expedition commemorate the work of America's most famous Arctic explorer, Admiral Peary, discoverer of the North Pole twenty-odd years ago.

To facilitate the work of the expedition, an Evinrude Sportwin motor has been shipped for use on a metal hull, and on long pulls for use on a canoe and Eskimo kayak. Its steady purr will mingle with the scream of the Arctic tern and penguin. Its propeller will fleck with foam waters that have never felt the thrust of an outboard motor before.

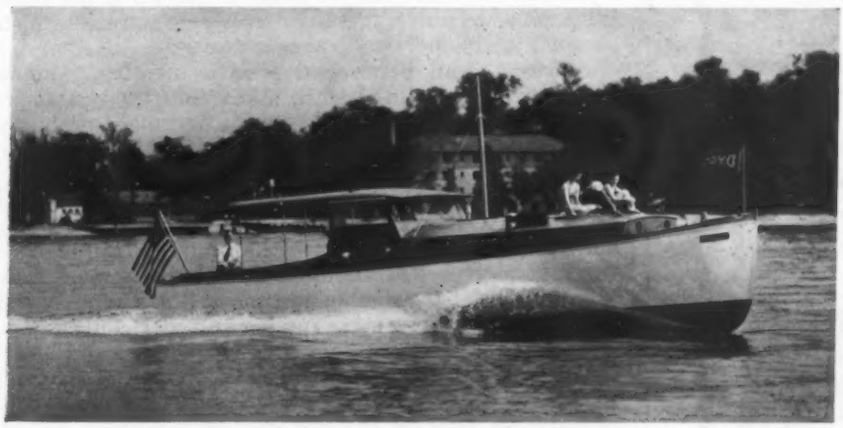
Other Evinrude motors have plowed the waters of the South Pole. In 1928 the Hearst-Wilkins Expedition used them in the Antarctic to further their scientific studies. Elto motors, also manufactured by Outboard Motors Corporation, Milwaukee, were used by Capt. Donald B. MacMillan as early as 1923 when that expedition arrived in the Arctic Ocean for a 16-month stay. On a lecture tour after his return, MacMillan expressed his appreciation of the usefulness of his outboard in carrying out his work.

London Brokerage Firm Organized

Notice has been received of the organization of the firm of E. G. Davies, Ltd., yacht brokers, of 11–12 Pall Mall, London.

Mr. Davies' connection with the field of pleasure boating is a long one, dating back to 1904. For more than twelve years he served with the late Alfred H. Brown, well-known naval architect, many of whose designs found their way to America. After the war Mr. Davies assumed charge of the yacht agency department of the London firm of Mr. James A. Smith and during this period put through many important sales.

E. G. Davies, Ltd., is in a position to give adequate service to American clients.



"Chuck," a Matthews "38" owned by Charles Coryell of Algonac, Mich. Twin 110 h.p. Scripps engines drive her at 22 m.p.h.

(Below) Two 8-cylinder Gray engines have powered this 38-foot a.c.f. cruiser to three successive victories in the Palm Beach Cruiser Race

. . . DOWN
to DAVY JONES *with*
that Landlubber China!

CHINA that's chipped, china that's cracked has no place in a ship-shape galley. Right now you can ship a set of gallant Ovington china for your craft for as little as $45. That includes a complete service for six with your club and owner's burgees on each piece.

OVINGTON'S

Yacht China, Crystal, Silver . . . 3rd Floor

437 FIFTH AVENUE, NEW YORK

Pipe these new Lenox china patterns with crystal to match. Ivory bodied with gold edge with bands in color. Dinner plates from $36.50 a dozen. Other pieces in proportion.

Insurance Rates Not Too High

(*Continued from page 55*)

added feature of the Protection and Indemnity Clause, gives as broad coverage as the full coverage insurance written on automobiles? Can an owner, no matter how careful he may be, prevent his boat being run into while at anchor, or struck by lightning, or springing a leak? Can he prevent careless people in a rowboat or canoe getting in his way, and being injured or drowned?

The rates on yachts, as a class, are based on several years experience with losses, and while they may seem high, considering the broad coverage given, I know from my experience that they are not unreasonable; on the contrary, considering the fire and explosion hazard, the Companies seem more than fair.

From records available, I find that for the past four years the Companies returned about fifty cents of every dollar taken in in premiums in the payment of losses. The overhead in running the business, making surveys, paying broker's commissions, etc., is roughly another forty-five cents, leaving the Companies a bare profit of five cents. Is this excessive?

Of course, any owner who wishes to do so, has the privilege of carrying his own insurance. Several large corporations have in recent years established a sinking fund to care for their insurance, rather than pay premiums, and this has worked out quite satisfactorily. But can the individual owner do this?

From the fact that the two principal Companies writing Yacht Marine Insurance are doing a business of over a million dollars each in premiums in this kind of insurance, it does not look as though business was falling off on account of high rates.

E. H. TUCKER

\+ +

Under the Lee of the Longboat

(*Continued from page 66*)

After all the hullaballoo about parachute spinnakers, jib topsails, club topsails, and so on, these kites played practically no part in the race at all. I don't know of any boat which even got a chance to set any kind of spinnaker, and Genoas and jib topsails were of very little use. One boat, *Vamare*, split her Genoa at the start, and later split her mainsail, yet finished well up in the fleet. Working sails, plus a trysail or two, were the sails which counted in this particular race.

Practically all boats had seasick members among their crews, and some had so many that the boats suffered in handling. The head seas the first night probably started the ball rolling, and head seas for the rest of the trip kept the patients from recovering.

Of the casualties, the loss of *Adriana* has been noted elsewhere. *Amberjack* sprung a leak the first night out, and returned to port. *Cyclone* had rigging trouble, also the first night — the shoulder cleats on the mast were said to have let the rigging down. *Sea Witch*, a fairly fast craft, carried away a lot of rigging and gear, and came in poorly as a result. *Brilliant* split her Genoa, and had a lot of trouble with her club topsail. *Teragram* split her fisherman staysail, but managed to make repairs so that it could be used on the last day. Many boats leaked, both through the top and through the bottom — hardly a boat but what hung out a galaxy of blankets, cushions, clothes and sails to dry as soon as they were safely anchored in Hamilton Harbor.

Judging from accounts by eyewitnesses, the feat of Bobby Somerset, Commodore of the Royal Ocean Racing Club, in jamming *Jolie Brise* alongside the burning *Adriana* in a strong wind and tumbling sea, and the rescue of all but one of a crew of eleven men, was a highly courageous act and as splendid a feat of seamanship as one could ask for.

It is doubtful if any ocean race ever saw harder driving than that which took place on many of the boats. Many a boat had her cockpit half full of water for long periods of time at different stages of the race, and when a 60-foot schooner fills her cockpit, I submit that she is doing quite a bit of sail carrying.

MALABAR X, *by Alden*
Winner of Class A and the Bermuda Trophy

2nd—Grenadier, *by Alden*

3rd—Water Gipsy, *by Alden*

4th—Teregram, *by Alden*

ALDEN BOATS WIN FIRST 4 PLACES

AS a fitting climax to a remarkable past record, Alden boats won the first four places in this year's Bermuda race.

Winner of Class A and of the Bermuda Trophy was Malabar X. Second, third and fourth respectively were Grenadier, Water Gipsy and Teregram. These four Class A boats finished in the same order for the Bermuda Trophy in competition with both Class A and Class B boats, sailing on time allowance.

Records for the past few years show that Malabar X won Class A in 1930; that Alden boats won four of the first ten places in 1928; that Malabar VII won Class A and the Bermuda Trophy in 1926, when Black Goose won in Class B; and that Malabar IV won Class A and the Trophy in 1923.

It takes not only speed but safety and seaworthiness to make such a consistent record. Add to these qualities the traditional comfort of Alden-designed yachts, and their distinctive merit is obvious.

If you are interested in boats that win, won't you consult us? We should be glad to start for you a set of plans in which the typical Alden characteristics will be adapted to your individual needs.

JOHN G. ALDEN

148 STATE STREET BOSTON, MASS.

NAVAL ARCHITECT YACHT BROKER

A CLEAN SWEEP
for
KELVIN-WHITE

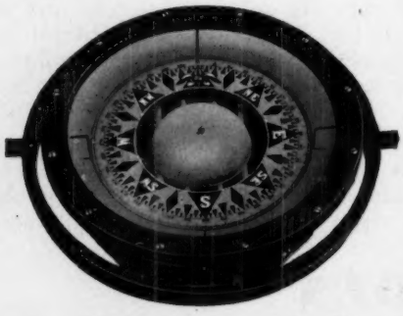
THE FIRST SIX TO FINISH IN THE BERMUDA RACE CARRIED KELVIN-WHITE COMPASSES

The thrilling Bermuda race is over. We congratulate the winners on their success. We admire the sportsmanship of the losers. We take great pleasure in the realization that KELVIN-WHITE compasses guided so many towards their goal.

A list of the many participants using KELVIN-WHITE compasses includes:

Boat	*Owner*
Malabar X	John G. Alden & R. I. Gale
Grenadier	H. A. Jr., and S. Morss
Water Gipsy	Wm. McMillan
Teragram	George W. Mixter
Highland Light	Frank C. Paine
Brilliant	Walter Barnum
Barlovento	P. S. duPont, 3rd
Amberjack II	Paul D. Rust, Jr.
Mandoo	D. S. Berger
Malabar V	Herbert Parsons
Ayesha	John R. Hogan

The confidence and endorsement of such yachtsmen and sportsmen means much to us. We shall always respect it. To continue to design and supply the finest yachting equipment, perfected by experiences under varying conditions in these ocean races, will always be our primary objective.



KELVIN-WHITE COMPANY

112 State St., Boston ★ 38 Water St., New York

On the Starboard Tack to Bermuda

(Continued from page 27)

rot. The boat was declared sound and properly equipped to enter the race. That this inspection was not faulty was borne out by the fact that the boat withstood two weeks of hard weather without leaking, and her crew returned in good health, with ample food and water remaining. During the two weeks' interval, her experience might have been that of any boat of 46 feet overall length under the prevailing conditions.

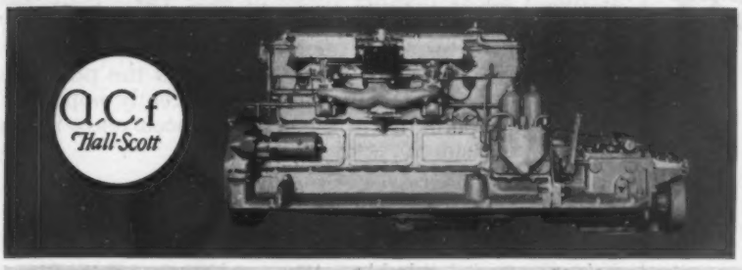
For the first three days *Curlew* did well, reaching a latitude of 100 miles north of Bermuda, but being driven to leeward and the eastward by the fresh head wind and steep seas. All on board lent willing hands to reduce canvas in the squalls and the boat behaved well. On the fourth day, those who were in Bermuda and those who were outside will recall that it blew very hard from the southwest. *Curlew's* crew estimated the velocity at 40 m.p.h. In these conditions, under reduced canvas, *Curlew* was driven farther to the eastward, as it was anticipated would be the lot of the smaller boats by those who had already reached Bermuda. Added to these circumstances was the eastward set of the currents around Bermuda, which navigators making landfalls on the third day estimated to be between one and two knots. The net result of adverse wind and current brought *Curlew*, at the end of the fourth day, to the latitude of Bermuda, but 100 miles to the eastward.

Under reduced canvas, *Curlew* could not hope to beat against the strong southwesterly, high seas, and adverse current; so they tacked north and south, awaiting a shift of wind, meanwhile being carried to leeward about one knot per hour. For three days there was no let-up in the wind, and *Curlew*, being carried to leeward about thirty miles per day for three days, reached a position 200 miles east of Bermuda. It appeared to her crew that the wind had settled against them. Overdue, and with only one week of their vacation remaining, the crew decided that the better course was to ease sheets and sail for the steamer lanes and home. At the end of the eighth day *Curlew* turned in a good run of 160 miles, and then the wind dropped. Had they waited one more day they would have made Bermuda about the same time that *Spanish Rose* came in.

The calm was followed by that nasty northerly over the Fourth of July week-end which made it impossible for them to get to the westward, but allowed them to make northing toward the Atlantic steamer lanes where they hoped to report.

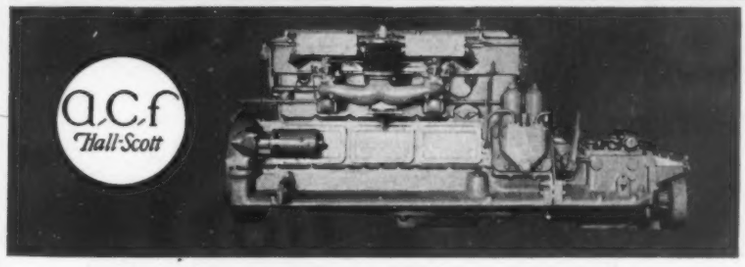
Finally, on the twelfth day out, they reached the steamer lane and sighted four tramp steamers in the distance. Flags were hoisted but were not distinguished. Distress signals were considered, but not being in distress and not wishing to create a needless sensation, they were not used. On the thirteenth day, due to their original position well to the eastward and the easting resulting from sailing on the port tack in the northwesterly, a landfall was made well to the eastward and on Davis South Shoal Buoy, south of Nantucket. By this time there was a fair wind from the southwest and a course was laid for Newport. It was then that the Coast Guard sighted *Curlew* and hove alongside, advising that a search was being made for her and asked if they needed assistance. *Curlew's* crew asked to be reported but obviously needed no assistance, going on their way with the first news of the extensive search being made for them.

On arrival in Newport they were boarded by the press who unfortunately made the worst of what actually occurred. The crew endeavored to make light of the situation in an effort to make it appear unsensational, which, unfortunately, was misconstrued by those who read the



The EXPLORER*—6 cylinder, 175 h. p. marine engine—was especially designed by Hall-Scott for use in large cruisers, auxiliary sailing craft, and wherever heavy duty work is required.*

The "Helen" built by Stephens Brothers of Stockton, California, for Mrs. Griswold Hayward of Boston, Massachusetts. Length 60' . . . beam 13' . . . draft 3' 6". Powered with two 175 h. p. Hall-Scott EXPLORERS *with 2:1 reduction gears. Speed 20 m. p. h.*



Hall-Scott EXPLORERS power this 60′ yacht . . .

Power her economically and efficiently—a total of 350 h. p., driving through 2:1 reduction gears, deliver a steady cruising speed of 20 miles an hour.

Matching the excellence of her power-plant, the "Helen" is a trim, sturdy craft, luxuriously appointed, and a worthy addition to the fine yachts belonging to the Boston Yacht Club. Built on the West Coast, by Stephens Brothers of Stockton, California, she is participating in the events of the 1932 season on the East Coast, under the flag of Mrs. Griswold Hayward, her Boston owner.

More and more custom-built boats are being powered with Hall-Scotts. Designers, builders and owners are agreed, in this year of values, that Hall-Scott offers the most for the money—ease of installation, ease and economy of operation. If you are building, or re-powering, ask us for full details, specifications, and prices on the Hall-Scott line, which includes motors for practically every marine need.

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accounts anent making fudge at sea. Their boat was sound, they suffered no distress, and they had made all possible effort to report t emselves.

The crew of the *Curlew* deeply regrets the publicity which surrounded the incident and sincerely hope that the above explanation will clarify the occurrence in the eyes of yachtsmen.

BERMUDA RACE. STARTING FROM MONTAUK POINT, JUNE 25, 1932

CLASS A

Yacht	*Owner*	*Elapsed Time*	*Allowance*	*Corrected Time*
Malabar X	R. I. Gale, John G. Alden	75:42:29	5:53:41	69:48:48
Grenadier	H. A. and S. Morse	76:47:28	6:55:24	69:52:04
Water Gipsy	William McMillan	76:57:52	6:00:48	70:57:04
Teragram	George W. Mixter	76:13:24	4:40:00	71:33:24
Highland Light	F. C. Paine	71:35:43	6:00:00	71:35:43
Brilliant	Walter Barnum	76:42:07	5:04:46	71:37:21
Mistress	G. E. Roosevelt	75:10 51	3:00:27	72:10:24
Barlovento	P. S. duPont, 3rd	75:47:51	3:32:33	72:15:18
Lexia	Major T. P. Rose-Richards	80:08:26	3:53:38	76:14:48
Vamare	Vadim Makaroff	89:28:11	11:56:56	77:31:15
Discovery	J. H. Nichols	98:37:46	6:54:46	91:43:00
Mandoo	D. S. Berger	97:10:58	4:57:36	92:13:22
Sea Witch	E. S. Parsons	123:35:15	7:30:36	116:04:39
Jolie Brise	Robert Somerset	Withdrew		

CLASS B

Dorade	R. Stephens, Jr.	81:33:33	9:22:23	72:11:10
Twilight	Edw. S. Bradford, Jr.	98:09:55	17:33:45	80:36:10
Ayesha	John R. Hogan	97:56:33	15:45:47	82:10:46
Sonny	Albert D. Phelps	95:08:49	12:56:54	82:11:55
Viking	P. LeBoutillier	91:24:26	9:08:34	82:15:52
Malabar V	Herbert Parsons	94:53:17	11:56:56	82:56:21
Duckling	Chas. H. Atwater	119:00:08	19:47:21	99:12:47
Zena	C. H. Masters	127:31:30	22:09:16	105:22:14
Amberjack II	Paul D. Rust, Jr.	Withdrew		
Cyclone	F. Jay Wells	Withdrew		
Dainty	Alfred A. Darrell	Withdrew		
Curlew	David Rosenstein	Withdrew		

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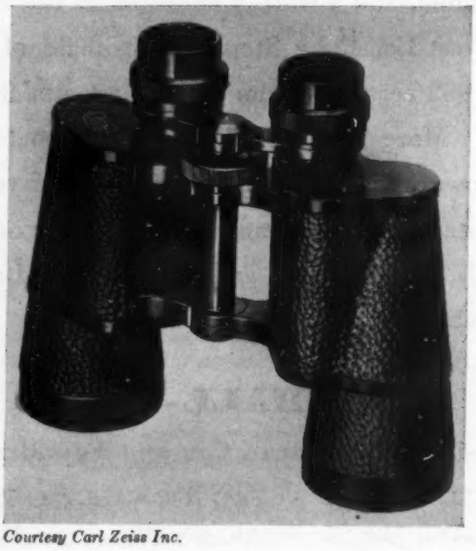
The Eyes of the Ship

(*Continued from page 35*)

fore, the lenses must be set and held in the binocular to withstand the rough handling of marine usage.

To sum up these qualities, a binocular should bring distant objects close to the eyes, accurately, clearly and brightly. For marine use, a 7 by 50, that is, seven power binoculars with a 50 mm. field of view, is ideal. A 10 by 50 is more powerful, but more expensive. A 6 by 50 is a good type to use as well. There are several excellent makes to choose from — the American-made Bausch and Lomb glasses, the German Zeiss and Leitz binoculars, and the English-made Ross glasses.



Courtesy Carl Zeiss Inc.

Photograph by W. B. Jackson

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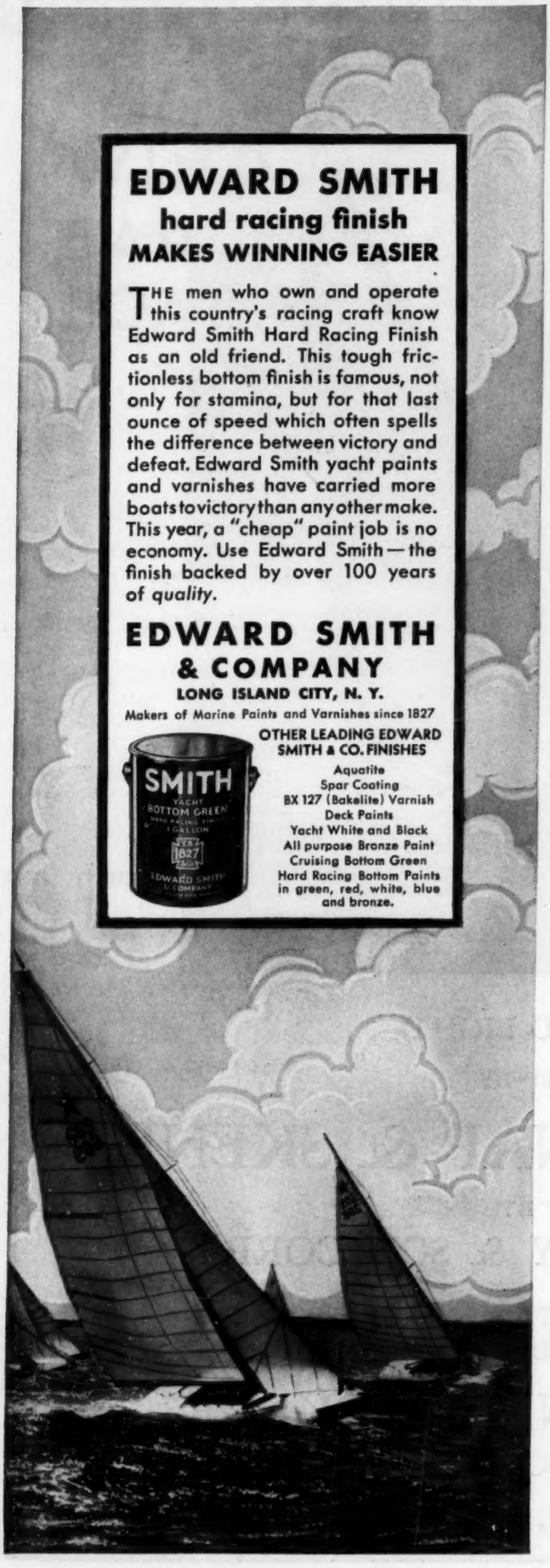
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THE men who own and operate this country's racing craft know Edward Smith Hard Racing Finish as an old friend. This tough frictionless bottom finish is famous, not only for stamina, but for that last ounce of speed which often spells the difference between victory and defeat. Edward Smith yacht paints and varnishes have carried more boats to victory than any other make. This year, a "cheap" paint job is no economy. Use Edward Smith — the finish backed by over 100 years of quality.
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All purpose Bronze Paint
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Hard Racing Bottom Paints
in green, red, white, blue
and bronze.

From the Tank to the Motor

(*Continued from page 51*)

motor stops. In order to get around this fault of the vacuum tank, a few installations have been made which used the suction of a special oil or water pump to replace the suction of the engine manifold. In one particular instance an elaborate system was used which employed the suction of the manifold to fill the vacuum tank when the motor was throttled and the speed of the boat was low, and then changed over to suction produced by a small fitting on the outside of the hull, shaped to produce a partial vacuum when the boat reached high speed and the suction in the manifold became too low to lift the fuel from the tank.

The mechanical fuel pump, driven by the engine and a part of the regular engine installation, is, without question, the best system so far devised. The pump is built with a small reservoir which acts as a settling chamber and holds enough fuel so the motor can be started without hand pumping or priming. And it has the great advantage of giving a steady and even pressure on the carburetor even when the boat rolls or makes sharp turns. An even greater advantage is found in the fact that the flow of fuel ceases as soon as the motor stops. Even if the gasoline valve at the carburetor is left open and the carburetor float valve leaks, very little fuel can be lost by flooding out of the carburetor bowl because there is no flow from the tank to the carburetor. Electric pumps have been used in many boats, both of the racing and cruising type, but the advent of the safer and more positive mechanical pump has made them a thing of the past. They find their field where the engine builder has made no provision for a mechanical pump.

An interesting little gadget which has been developed within the past year or two is an independent mechanical pump which can be attached to the tachometer fitting on the motor. The manufacturer of this device has so laid it out that it does not interfere with the regular tachometer. Any owner can put this mechanical pump on the motor if it has a tachometer attachment.

In some accessible location near the carburetor, a strainer should be placed in the gas line. If a single strainer is used, it should be on the motor side of the shut-off valve at the motor so the flow of gas can be shut off quickly and the strainer cleaned. Better use one of the double models with a valve to send the fuel through one side while the other is opened and any dirt and water emptied out.

Tanks and gas lines in auxiliaries present unusual problems, due to the angle of heel at which the boat sails. She may be heeled down on one side for hour after hour. If two tanks are used, one out on each side of the boat, and the tanks are connected by a cross lead to the pipe which connects to the motor, gasoline will flow from the tank on the high side into the tank on the low side, fill that tank, and then run out through the filling pipe or the vent. To prevent it, non-return checks should be placed in the lead from each tank (Sketch 10) and even then it is better to keep the valve at the outlet of one of the tanks closed until all the fuel in the other tank has been used; then close off the valve on the empty tank and run on the full one.

Some years ago there was considerable agitation about placing the tanks in a compartment which could be flooded. The feed lines were carried from this compartment to the motor on the outside of the hull, but this is an expensive and cumbersome arrangement, and the results are no better and no safer than those achieved by the use of common sense in the layout of the piping and the utmost care in the selection and installation of the material.

CLEAN WATER—AN ORDERLY YARD—LOWER COST

are three important points to keep in mind when selecting a yard for Fall storage. Oils and floating obstructions ruin the appearance of a beautiful paint job. This can be eliminated by launching into clean water at Peirce & Kilburn's. Our turntable, the first on the Atlantic seaboard, is but one of the methods of decreasing your costs and increasing our service.

Make New Bedford your port of call. You are invited to inspect our equipment and facilities for storage. We have an interesting booklet which we will gladly mail to you upon request.

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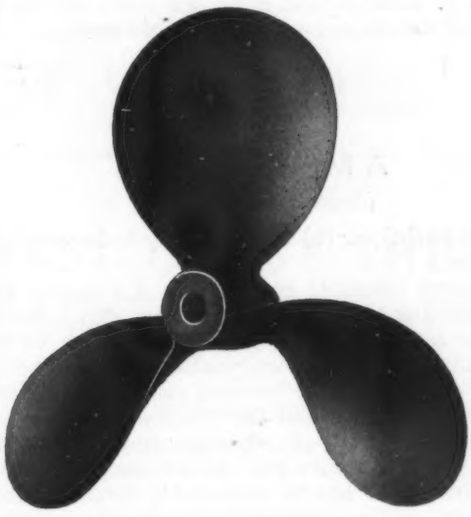

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Insist on a HYDE

We will gladly mail you a copy of "Propeller Efficiency" if you will ask for it. It is a booklet of propeller information of interest to every boat owner

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Bermuda race

WERE EQUIPPED WITH

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SPEEDOMETERS

Our descriptive booklet will be sent on request

The recent Bermuda race clearly indicated the wide acceptance and high esteem in which yachtsmen hold Kenyon Marine Speedometers. The Malabar X, winner of Class A; the Dorade, winner of Class B; the Grenadier; Water Gipsy; Teragram; Brilliant; Mistress, and Barlovento; were all within the first ten to finish, and were all Kenyon equipped. We are indeed pleased that Kenyon Marine Speedometers contributed to the success of these outstanding yachts.

Kenyon Marine Speedometers and Logs offer the most accurate means of measuring nautical speed and changes of speed. They have become an essential part of the modern yachtsman's equipment. They are offered in various speed ranges for both sail and power boats. If you are not yet thoroughly acquainted with Kenyon Marine Speedometers and Logs, write for our booklet.

KENYON INSTRUMENT CO.

564 East First Street Boston, Mass.

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KELVIN-WHITE COMPANY

112 State St., Boston 38 Water St., New York

The Bahama Sharpshooters

(*Continued from page 45*)

lines somewhat by these minor changes. The basic hull design is unchanged, however.

Some changes were made in the details of the rig in order to get the features of a single-hander. That is, all running rigging is to belay within reach of the helmsman. For this reason, the fall of the halliard and the fall of the toppinglift both reeve through a double block on the stemhead and lead aft, instead of belaying on the stemhead, as formerly. The pin through the stemhead is retained for mooring and to prevent the anchor rode from jumping out of the chock formed in the bulwarks at the bow. The tricing line is also brought aft, reeving through a deck block. The tackle likewise is brought aft; the tackle-fall reeves through a block on deck. In this manner, it will be possible to belay all important gear within reach of the helmsman. A jig on the outhaul may enable a man to set up the mainsail better, so this has been added.

A small self-bailing cockpit seems desirable, and in a boat lacking in headroom it is best that it should not be necessary to move about any marked distance in the cabin. Therefore, the double house has been employed. I am indebted to Mr. Charles M. Blackford for this very practical suggestion in regard to small boats.

The arrangement proposed gives two berths and a W. C. in the forward cabin; stove, sink and ice box in the after cabin just abaft the bridge deck, with seats, table and clothes locker also, in the after trunk. Under the bridge deck will be located the tanks for fresh water, part of the ice box, and a coal or wood locker. The trunks are to be lighted by two deck lights of the prism type in each, as well as by the usual cabin ports. A pin rack under the tiller will act as a tiller comb, and enable the tiller to be fixed in any desired position. Inside ballast will be broken sash weights.

The advantage of the Sharpshooter is that she is a safe type of catboat and possesses many of the good qualities of the cat, as well as some of her own.

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A Matter of Fair Play

(*Continued from page 62*)

windward yacht), or (b) bearing away to leeward of the obstruction.

The fourth essential condition is a negative provision, pertaining to marks of the course, and is set forth in the last sentence of paragraph one of Rule 32 to the effect that if the windward yacht can pass the mark without tacking, but the leeward yacht cannot, the leeward yacht may not hail the other about. The words "if she is not able to tack without coming into collision with the yacht to windward" would seem to mean that the leeward yacht has no reasonable means of passing to windward of the obstruction except by tacking.

Note particularly that to invoke Rule 31 an overlap is a prerequisite, but that to invoke Rule 32 the yachts need not be overlapped.

In the case under consideration "A" can pass astern of "X" without altering her course. It follows, therefore, that "B" has no ground of protest under Rule 32.

The question then arises whether "B" has grounds of protest under Rule 31.

If "X" were a moving vessel, "B" could call for room to pass astern. This is clear not only by the wording of the last sentence of paragraph one of Rule 31, but by the case of "*Moana* vs. *Victory*," decided by the Council of the British Y. R. A. early in 1928.

6-Cylinder unit. 20-in. bore x 32-in. stroke. Capacity, 1100 hp. at 200 r.p.m.

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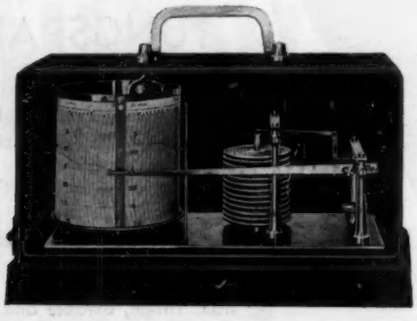

For shipboard use the Friez Barograph illustrated above is in widespread favor with deepwater yachtsmen, recording infallibly the *rate* of rise or fall in atmospheric pressure, while on shore it makes an admirable companion instrument to the WEATHERMAN.

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It is true also that if the obstruction were a shoal or a point of land with a safe passage to leeward only, or a mark of the course which had to be passed on a required side, or if both yachts were sailing free, "B" could claim room to pass between "A" and the obstruction or mark because the three essential conditions requisite to invoke Rule 31 were established.

Does the fact that there is clear water around "X" alter the respective rights of "A" and "B" and modify the second basic rule of yacht racing, *viz.*, "Windward yacht keeps clear"?

The weight of authority holds that the inside yacht, whether or not she is overtaking yacht, cannot claim room unless she is in such a position that without a decided and appreciable change of course she cannot avoid fouling the obstruction. There can be no question, therefore, that were the obstruction in the instant case a stationary object, such as an anchored rowboat or a large government buoy, of which "B" might keep to windward without an appreciable change of course, it could not be said that she was in danger of fouling the obstruction. Such an obstruction is not "an obstruction to sea room" within the meaning of Rule 31. "B," therefore, would not have the right to compel "A" to bear away.

It also seems clear that were the obstruction of such length that if "B" were forced to pass it to windward she would, to all intents and purposes, be put out of the race, it would not be fair to deny her the right to pass to leeward.

Whether or not an obstruction of, say, 50 to 150 feet in length which the inside yacht cannot pass to windward without tacking, changes the respective rights of "A" and "B" would seem to depend upon what is meant by the words "danger of fouling such . . . obstruction."

If these words are to be interpreted as meaning that "danger of fouling" is present when a yacht is closely approaching a position in which an immediate and appreciable alteration of course will be necessary if a foul, either with the obstruction or with the outside yacht is to be avoided, *irrespective* of the fact that the inside yacht has an *alternative* means of avoiding a foul (as in the instant case by checking her speed and falling off into "A's" wake), then there can be no question as to the answer: "B" would be entitled to room to pass to leeward of the obstruction.

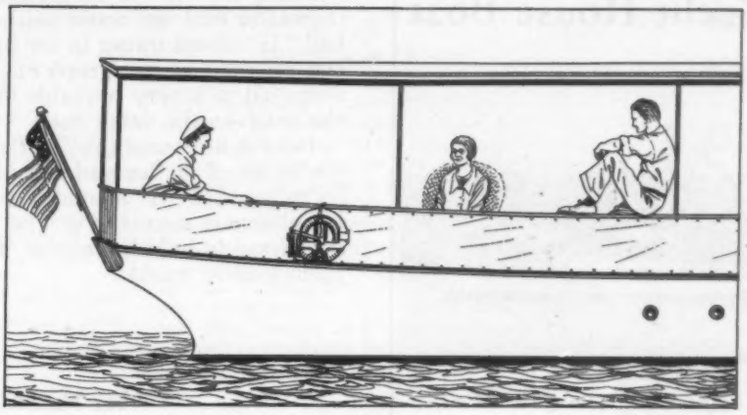
If, on the other hand, these words are to be interpreted as meaning that "danger of fouling" is present *only* if "B" has no alternative except to tack, it would seem that in the instant case "B" cannot claim room to pass to leeward of the obstruction; that "B" should have foreseen the situation in which she now finds herself, and if she does not wish to tack and pass to windward of "X," she should, before arriving in such close proximity to "X," have checked her headway and borne off into "A's" wake.

The spirit of fair play permeates each of the rules. May there not, therefore, be read "between the lines" of Rule 31 the intent of fair play, *viz.*, that under no circumstances shall the inside yacht be hemmed in with only one means of escape?

It must be remembered that in the case being discussed there is no "required side" on which "X" must be passed. There is clear water all around. To compel "B" to pass it to windward will not "put her out" of the race. Either yacht is at liberty to pass "X" either to windward or to leeward. "B" is not hemmed in with only one means of escape.

"B" will argue that if she is obliged to tack to windward of "X" she will be forced slightly to overstand the mark. It is equally unpleasant for her to check her speed and bear off into "A's" wake.

JOHNSON Life Ring and Water Light Holder



RELEASES By A Pull —Cannot Jam—It's POSITIVE

Guest: — Why did you buy a Johnson life-ring holder? I just keep mine on a hook.

Owner: — Bert was standing in the dink washing down the other day when he lost his balance and fell overboard. The tide here is very swift and he went astern a mile a minute. I grabbed the outside ring and found he had tied it at the bottom with heavy marline to keep it from getting askew. Flo tried to throw him the life ring with the flare tied to it but the weight of the can stopped the ring and the lanyard got wrapped around a stanchion. By the time we got the rings over he was too far from them to do any good. He knew better than to swim against the tide. Of course we got him with the dink; but suppose someone fell over at night with the boat under way?

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Full diesel equipment. In addition to the main diesel engines, a diesel electric generator supplies ample current for all needs, while the diesel fuel oil is also utilized for heating and cooking purposes resulting in a combination of economy and safety from fire hazards hitherto difficult to obtain.

Added yachtiness of line thru such new features as sunken pilot-house and bridge.

Living accommodations in the new Mathis cruisers excel the finest quarters to be found on many boats of double their size.

The speed, seaworthiness, and unusual economy of operation of this advanced type makes its appeal most pronounced to those desiring the ultimate in personal abode and transportation on inland water or at sea.

May we send you further details?

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On the other hand, would it not be even more of a hardship on "A" to be obliged to bear off and shortly thereafter find she could neither weather the mark nor hail "B" about owing to the inhibition contained in the last sentence of paragraph one of Rule 32, and thus be relegated to a very probable unchanging stern-chase on the reach to the finish line?

Does it not seem that *on the facts* in the instant case the cause of justice and fair play would best be served by ruling that "B" should be compelled to elect between her alternate means of escape, and that "A" should be permitted to hold her course, weather the mark and remain leading yacht?

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The New Member

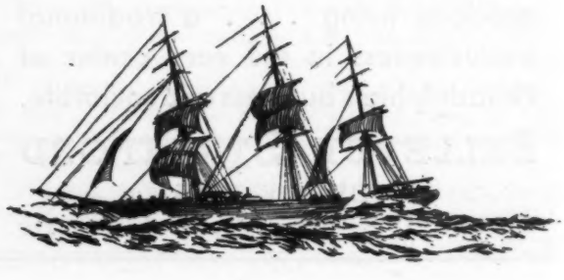
(*Continued from page 41*)

ready full of condensation," says he, so with that empties another bumper and departs, leaving us upon this vexing business, it being decided these committees know not the keeping of correct time. Also the matter of the dinner we give, Brightbrass saying as we did win the wager about the windward mark, so he expects to see plentiful spread.

Presently we all to shore, and later to the club to dine, where I find Mr. Trigger and even some of the committee to be invited. All yachtsmen seem prone to argument and sharp difference of opinion, yet they do seem to forgive readily. At any rate a gay company we were when two stout fellows from each yacht bear in the great silver trophy — a rare sight, and all overflowing with goodly rum. Many were the speeches made, many the songs we sung. The Commodore made fine talk, saying many good things of the committee and Mr. Trigger and of how hard they worked to make the success of all, and that we owed them much, etc., etc. What time Mr. Trigger says he is pleased at the turnout of the racing fleet; that all his work would come to naught if it were not for such fine fellows as our Commodore and those that made up our crews, especially such men as Mr. Wetherhelm and Mr. Winch who work so patiently to further the sport, etc., etc., and etc. We were all quite taken away, so even I got me upon the table and made good discourse telling them how I intended to work diligently in the club's interest. Then a great clapping and stamping and more songs — whereupon the trophy being quite emptied, our stout fellows fell upon it with oil can and hacksaw, making to cut it in twain. But what horrible screeching they set up, though fortunately greatly abated by other sounds.

Then on come the dancing-girls, very sweet with flashing eyes, but not so clever methought, having a mind to think I could kick quite as high with so little clothes.

I just coming to a better view when a messenger to me making me very mad, a vexing matter, for it seems my wife awaits outside in the car and a high temper, needs must I take hurried leave and, alas — home, and so to bed.



Of Interest to the Skipper

(*Continued from page 73*)

New Maxim Exhaust Washing Silencer

By combining a water scrubber and a Maxim Silencer in one corrosion-proof unit, the Maxim Silencer Company has produced a compact, reasonably-priced silencer that not only makes the exhaust of a Diesel engine quiet, but also makes it sparkless and clean. On gasoline and gas engines, it will eliminate the possibility of exhaust line explosions.

It is expected that the device will be ideal for installation on the exhausts of Diesel engines used in tankers, where sparks must be eliminated absolutely. It will make the exhaust of a Diesel engine as inoffensive, as far as sparks and dirt are concerned, as the exhaust of a gasoline engine.

This new silencer is called the Model EW. It is built of cast iron throughout, making it corrosion-proof. It is smaller and lighter, size for size, than the standard dry type Maxim Silencer. A bulletin describing this latest addition to the Maxim Silencer line will be sent to those interested, upon request, from either Hartford, Conn., or 250 Park Avenue, New York City.

Activity at Nevins

Henry B. Nevins, Inc., have reported an active season devoted to the building of the schooner *Brilliant*, the Six-Metre *Nancy*, the yawl *Ayesha*, and 25 Ratsey international sailing dinghies, besides the commissioning of many well-known yachts. The yard has increased its facilities in many ways for the quick, easy and economical handling of boats for repair and storage.

When in City Island stop at the Henry B. Nevins Yard. There are many new and interesting features of interest to yachtsmen and Mr. Nevins is always glad to show people how things work. Among other things, the electric boat elevators are of interest. They handle 100 tons of boat with surprising ease and speed.

There is also an ingenious system of switches which makes for great speed in handling boats out of water.

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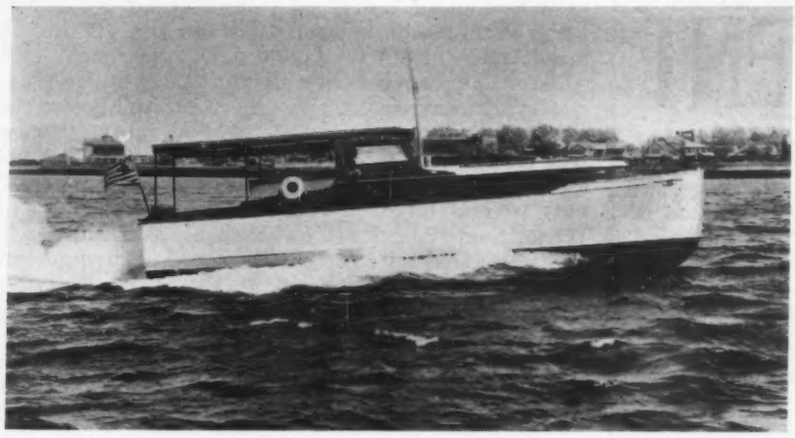
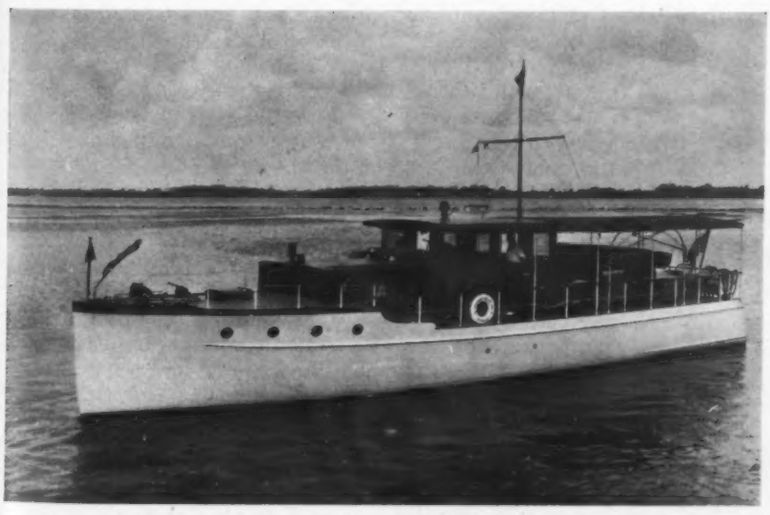
International Flares to Avert Danger

Owners of all yachts are, of course, vitally concerned with the safety of their boats and

(*Continued on page 89*)



A 38-foot twin cabin cruiser, recently completed for Mr. A. B. Moore, of Philadelphia, by Wheeler Shipyard Inc. With her Chrysler Imperial reduction gear engines, she attains a speed of 13 miles an hour. Provision has been made for a wide cruising radius and the accommodations are exceptional



"Genevieve III," owned by Mr. Walter W. Huntley, of Buffalo. She is 57 feet long, with beam of 13 feet, and is powered with two Sterling Petrel 6-cylinder engines. Volney E. Lacy was the designer, and the Rochester Boat Co. the builders

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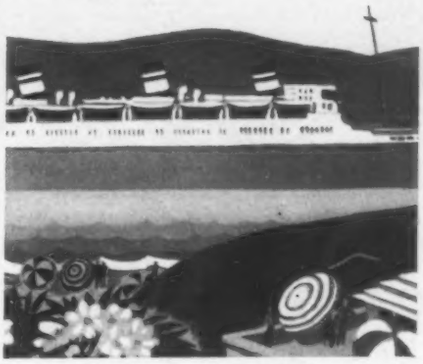

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Our new reduced prices will interest you

MURRAY & TREGURTHA INC.

NORTH QUINCY MASSACHUSETTS

Happy Ending

(Continued from page 30)

and nodded his head more emphatically, as if to say, "I told you so."

A moment later he looked back and called, "Better get your skiff aboard. This will be quick."

I thought him unduly anxious — as well he might be in an open boat — and left my skiff towing. Because of my neglect I was unable to watch some two hours later when the time came for him to reef. In the interval the wind had shot up to gale force and the slumbering sea had leaped to tumultuous, vicious life. What with heaving to to lower my mainsail, and inexcusably sagging down and overriding my skiff, my men and I had the busiest half hour of our experience. When they had righted the skiff and manhandled it aboard I had time to look around and see how Wiley had managed. He, too, was shortened down, and although his boat seemed to skip bodily from crest to crest he told me afterward that she made remarkably easy weather of it.

Swastika reached port first, and I was in readiness to receive him as he came careening up the narrow harbor. Though he made an eggshell landing alongside my yawl, he depended on us to secure him and lower his wildly slatting sail. And one of my men and I had to lift him bodily to my deck and below to a bunk.

"I did it that time," was all he would say of his experience at sea. I inferred that he spoke of his heart rather than of his feat of seamanship, for he added, "Looks like a spell with a doctor."

The next day we got him ashore and to his own room, where a doctor stethoscoped him and made other tests. His verdict — bed, and no more sailing — brought a look of profoundest gloom to Wiley's face. I stayed in port several days, visiting the sick man frequently. When, finally, I left, it was with his assurance that he was well cared for and that he would obey the doctor's orders and do nothing rash.

"The fact is," he told me, "I *feel* weak for the first time since I left the base hospital. This damned heart of mine, you know, has what they call a pericardial adhesion and has to turn itself upside down every time it pumps. It may knock off work any minute."

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I returned after two weeks, blithely expecting, as a well man does, to find Wiley recovered. But there was a wasted look to his face that took my breath away. Out of bed, but confined to his room, almost his first words expressed his repugnance to life ashore.

"I feel like a sick bear in a cage," said he, "padding about, wall to wall, bed to eating tray. If I could have a little sail on a calm day it would give me new life. But I haven't had quite the gumption to slip out against the doctor's orders."

"That's right," I counseled him. "Obey orders and build up slowly."

He turned savagely upon me. "But what's the use?" he asked. "If I stay in this hole I'll die. Sailing always does me good. If this wind would only let up!"

Although the vagaries of Channel weather are unpredictable by me, there seemed little chance of that. In the last week the wind had blown half a gale for five days and a whole gale for the other two. The sea pounded on the shore until it rattled the windows of the sick man's room. The wind howled down his chimney and puffed wisps of dead ashes out of the black grate.

"As for me," said I, "I'm quite content to be in port."

But that night the wind died. I awoke in the morning full of the joy of sunshine. In the leftover swell finding its way into the harbor the moored boats still rolled

Of Interest to the Skipper

(*Continued from page 87*)

of those aboard and are, naturally, anxious to provide protection to avert all possible danger. One of the best protections is the International Aerial Marine Flares. These flares are projected from a pistol to an elevation of 250 feet, where a small parachute opens, suspending a white or red flare of 50,000 to 30,000 candle power, visible for a distance of twenty-five miles.

The practical value of a distress signal depends entirely upon the distance that it can be seen. The International Flare virtually provides a lighthouse 250 feet high, sending out an S.O.S. over an area of 2000 square miles for half a minute. The white flares are indispensable for illuminating a dangerous coast, crowded harbor, or an oncoming vessel in the night.

Complete information and an illustrated bulletin may be obtained by writing to International Flare-Signal Co., Tippecanoe City, Ohio.

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Catalogs Received

Yachtsmen interested in auxiliary electric power plants for yachts will find a wealth of valuable information in a new general folder, *Kohler Electric Plants*. This illustrates and describes seventy-three models included in the Kohler line which covers a wide range of capacities to meet all requirements. Copies of this folder may be obtained by writing to the Kohler Company, Kohler, Wisconsin.

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Oil burners in marine stoves are becoming more and more popular afloat and for those interested in securing information about them, Elisha Webb and Son Company have published a catalog. The catalog illustrates, describes and gives dimensions of numerous Webbperfection oil burning steel ranges using the Valjean Carburetor process of combustion. Added to this are testimonial letters from satisfied users of these products. The catalog may be secured by writing to Elisha Webb and Son Company, 136 South Front Street, Philadelphia, Penna.

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The new Kermath-Farr catalogs have just been published and will be mailed gladly to anyone sending their request to the Kermath Manufacturing Company, Detroit, Mich.

The Kermath catalog gives complete specifications for all their motors, ranging from 4 to 450 h.p. Likewise, specifications and descriptions of all the Farr motors from the little Four "25" up to the Six "102" are given in the Farr catalog.

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List of Yachts of Racing Classes Available

Through the courtesy of Brooks Brothers, New York City, there is available for the 1932 season, an attractive little handbook listing the yachts of Western Long Island Sound, belonging to the various racing classes, together with their owners, racing numbers and class symbols. This extremely usable pamphlet is published for the Yacht Racing Ass'n of Long Island Sound.

Barbasol

JOE PULLS A FAST ONE

COME ON JOE WE'RE GOING TO DRIVE UP TO THE INN FOR MAIL
I GOTTA SHAVE FIRST
JOE, ARE YOU CRAZY? HOW CAN YOU SHAVE WITHOUT HOT WATER IF YOU CAN'T AT HOME
BECAUSE I'VE GOT SOME BARBASOL
IT'S THE MODERN SHAVING CREAM MY GIRL - WORKS IN HOT OR COLD WATER, ONLY TAKES A MINUTE BECAUSE THERE'S NO BRUSH-NO LATHER-NO RUB-IN AND LEAVES YOUR FACE FEELING LIKE A MILLION BUCKS
WHAT'S THAT!
GRAND! I'M GLAD YOU'VE GOT SOME SENSE AT LAST - ALL READY NOW
BARBASOL! BARBASOL! NO BRUSH, NO LATHER NO RUB-IN DUM DE DUM DUM

SHAVE WITHOUT LATHER! Get a tube of Barbasol today. Use it this way: **1.** Wash your face and leave it wet. **2.** Smooth on Barbasol—no need to rub it in vigorously. **3.** Wet your razor and SHAVE! That's all there is to the cleanest, quickest, coolest shave you've ever had. Because Barbasol's a cool, smooth cream, there are no harsh biting alkalis in it to torture a tender skin. It leaves the natural oil in, protecting the face from sun- and wind-burn, keeping it soft and smooth. Holds the whiskers erect so the razor can slice 'em off without pulling and scraping. No wonder it's the world's fastest-selling shaving cream. Generous tubes at all druggists', 35¢ and 65¢, or large jar, 75¢. The Barbasol Company, Indianapolis, Indiana.

Barbasol recommends TEFRA TOOTHPASTE

—In every 30¢ tube there is a free Tefra toothbrush refill, to fit a lifetime Tefra refillable toothbrush handle. For full information, tune in Barbasol radio programs listed.

Singin' Sam, the Barbasol Man, in songs you can't forget. Every Monday, Wednesday and Friday evening, at 8:15, Eastern Daylight Saving Time, over an extensive Columbia (WABC) Broadcasting hook-up.

The Old Singin' Master and his singers—mellow old hymns and ballads the way you like them. Tune in every Sunday night at 10:15, Eastern Daylight Saving Time, on the N. B. C. (WJZ) Blue Network, coast to coast.

Ray Perkins, Barbasoloist with Peter Van Steeden's Barbasolians, WEAF — N. B. C. Red Network, Tuesdays and Thursdays, 7:30 P. M. Eastern Daylight Saving Time.

Consult radio page of your local newspaper for stations

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This husky Matthews "38" Twin Cabin Cruiser is the latest member of the "Famous Family" of Matthews Stock Cruisers — every one of which is built for years of hard service, finished and equipped to bring pride to every owner — and, note this important fact — a big, heavy marine engine is standard equipment in *every* Matthews Cruiser.

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reminiscently, but the surface of the water was flecked by the gentlest of winds from the northeast. I looked out of the main hatch to see who had come and gone. Early though it was, *Thalassa's* mooring was empty.

I jumped into my skiff, and ashore, and ran full tilt to the lighthouse on the west pier, still damp from its bath of spray. Far to sea I saw a leg-of-mutton sail, slowly dwindling.

Full of misgivings, I returned aboard for breakfast and by an effort of will resisted the temptation to put after the afflicted man. Though his heart was weak his weather sense was still strong and I convinced myself that he would not get caught out a second time. All that lovely summer day I loitered at the harbor mouth, watching the shipping and ever turning an anxious glance to sea. At last I saw him coming from the west, sailing on an easy reach. As he drew near I could distinguish him in his familiar pose, arm thrown carelessly along the tiller, head showing above the gunwale, eyes on the luff of the sail. When he came nearer still I saw that the luff shook slightly and that *Thalassa's* course was not arrow-straight.

Before I had time to digest the significance of this, a deep-throated whistle blistered my ear drums and I looked around to see the Dieppe steamer charging out from her wharf. At full speed almost before she reached the entrance, she was giving all lesser craft the signal to keep clear. I looked again at *Thalassa*. What was she going to do, skim across the steamer's bow, or luff up and pass astern? A careful seaman would, of course, have passed astern, but I remembered Wiley's delight in his calculation of clearances when first I saw him at Trouville. *Thalassa* held to her course, clearing the packet's knife-like bow by a distance measurable in feet rather than in yards. I saw her stern rise to the bow wave, and just before the black hull of the steamer intervened I thought I saw Wiley put her about for the entrance.

It was my next thought that he had cut his distance so close that the steamer had run him down. But in a few seconds *Thalassa* reappeared, almost shaving the steamer's stern, and bobbing in her wake. She straightened up and on the starboard tack entered the harbor, the tide under her. A thrill of admiration tingled me as I saw that Wiley's nonchalance remained superb. He did not once look astern at the black death that had so narrowly escaped him.

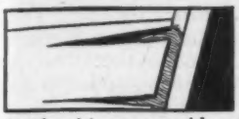
The wind by now was almost gone (getting ready for another week of southwesterlies, I thought) and it was more by the indulgence of tide than air that *Thalassa* drifted slowly to her mooring. But Wiley, sailor that he was, still kept his glance riveted to the luff of his sail.

Running ahead to my skiff I jumped in and shoved off. *Thalassa* sailed serenely on until her bow actually kissed her mooring buoy. Then, though she seemed to hesitate an instant, she kept on.

Speechless, I rowed alongside and touched Wiley's arm where it lay carelessly along the tiller. Its coldness was communicated through the coat sleeve to my fingers. I looked at the lifeless face and saw that though the eyes were open the mouth was closed, the corners of the lips just lifting to a smile.

"God!" I whispered, "if we could all go out as happily as that."

When Plank Ends Splinter



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